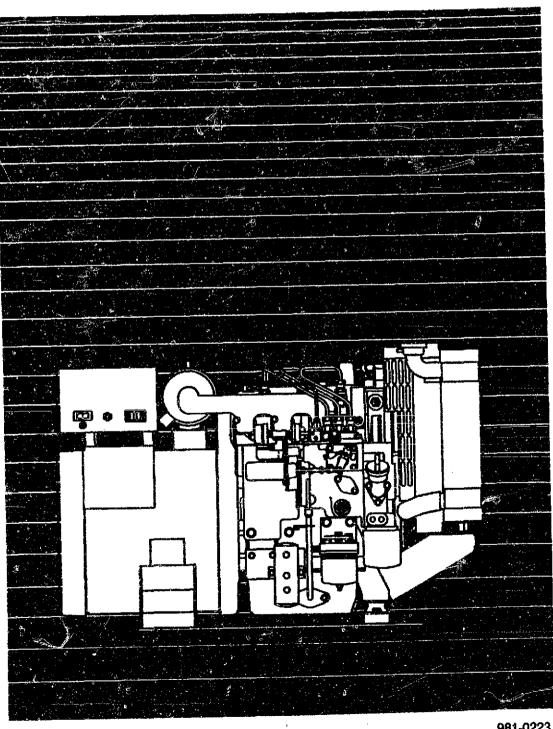
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# Parts Manual

# DKD



Printed in U.S.A.

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#### Introduction

This Parts Manual applies to the Standard Generator Sets listed below. The illustrations are arranged in groups of related items, and each part or assembly is identified by a Reference Number. All parts illustrated are typical, and unless otherwise mentioned in the description column of the parts lists, the parts are interchangeable between models.

These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The Right and Left side of the Set are determined by FACING the engine end (Front) of the Set.

#### NOTICE!

#### VARIATIONS WITHIN MODEL(S)

GOVERNOR: Style I has a flyball type system; Style II has a flyweight type system (See the Gearcase Illustration for visual external differences, and the Fuel System Injection Pump for internal differences.)

#### Set Data Table

MODEL IDENTIFICATION	RATING	MODEL IDENTIFICATION	RATING
6_0 DKD-*/#@	6,000 WATTS	7.5 DKD-*/#@	7,500 WATTS

- \* Voltage Codes follow model letter designations.
- Specification Number: Number 1 is Standard, all others indicate variations.
- Specification Letter: Letter advances (A to B. B to C, etc) with major manufacturing changes.
- These Generators are reconnectible, refer to Operator's Manual for wiring data.

#### Electrical Data Table

- B 120/240 Volt, 60 Hertz, 1 Phase, 3 Wire
- C 120/208 Volt, 60 Hertz, 3 Phase, 4 Wire
- D 120/240 Volt. 60 Hertz, 3 Phase, 4 Wire
- G 277/480 Volt, 60 Hertz, 3 Phase, 4 Wire J 120/240 Volt, 60 Hertz, 3 Phase, 4 Wire

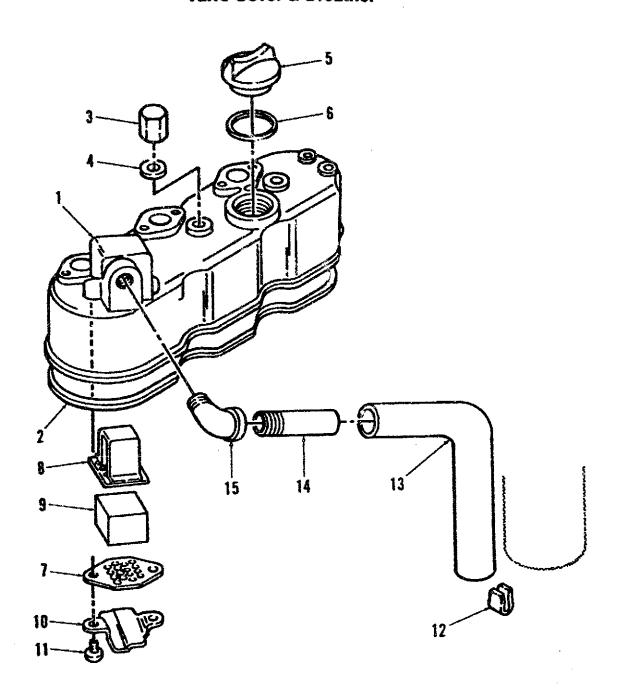
- L Reconnectible, 60 Hertz (Broad Range) P 120/240 Volt, 50 Hertz, 1 Phase, 4 Wire

- Z Reconnectible, 50 Hertz (Broad Range) R Special (Specification Number Reg'd to Identify)

- 1 120 Volt, 1 Phase, 2 Wire
- 3 120/240 Volt, 1 Phase, 3 Wire
- 3C 120/240 Volt, 1 Phase, 4 W (Reconnectible
- 4 120/208 Volt, 3 Phase, 4 Wire
- 4X 277/480 Volt, 3 Phase, 4 Wire 5D 120/240 Volt, 3 Phase, 4 W (Delta Wound) 9X 347/600 Volt, 3 Phase, 4 Wire 18 Broad Range, 1 & 3 Phase, 12 Wire



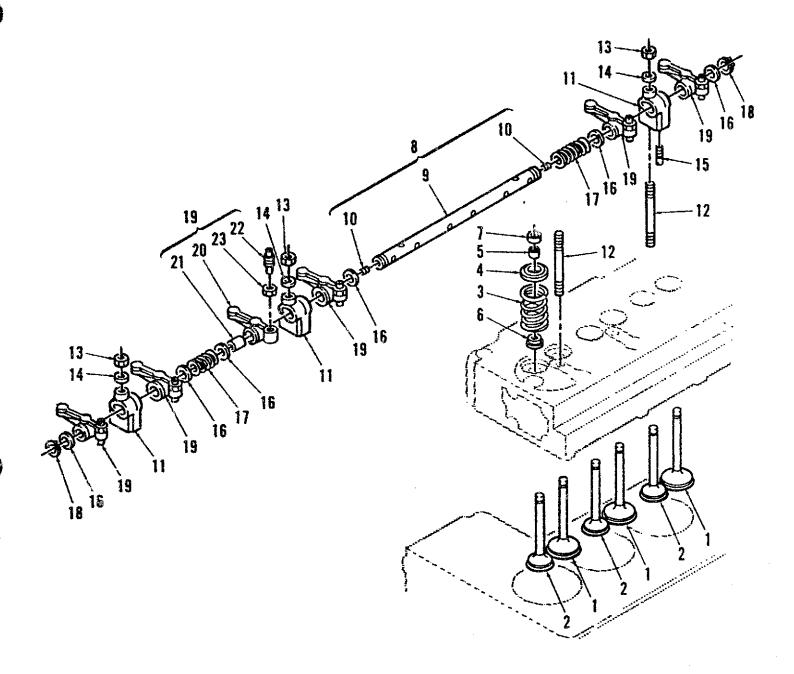
## Valve Cover & Breather



REF	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2280	1	Cover, Cylinder Head	10	185-2288	1	Shield, Breather
2	185-2217	ī	Gasket	11	185-2384	2	Screw, Machine - Pan Head
3	185-2290	3	Nut, Cap				with Lockwasher
4	185-2291	3	Seal, Oil	12	518~0449	1	Clip, Retaining
5	185-2093	1	Cap, Oil Fill	13	503-1321	1	Hose, Rubber (7/16" ID x
- 6	185-2349	1	0-Ring			1	$5/8* OD \times 26-1/2" LG$
7	185-2287	. 1	Plate, Breather	14	505-0302	1	Nipple, Pipe - Half
а	185-2230	1	Baffle, Breather	15	505-0011	1	Elbow, Pipe - Street, 90"
_	105_2222	1	Flement Breather				



## **Rocker Arm**



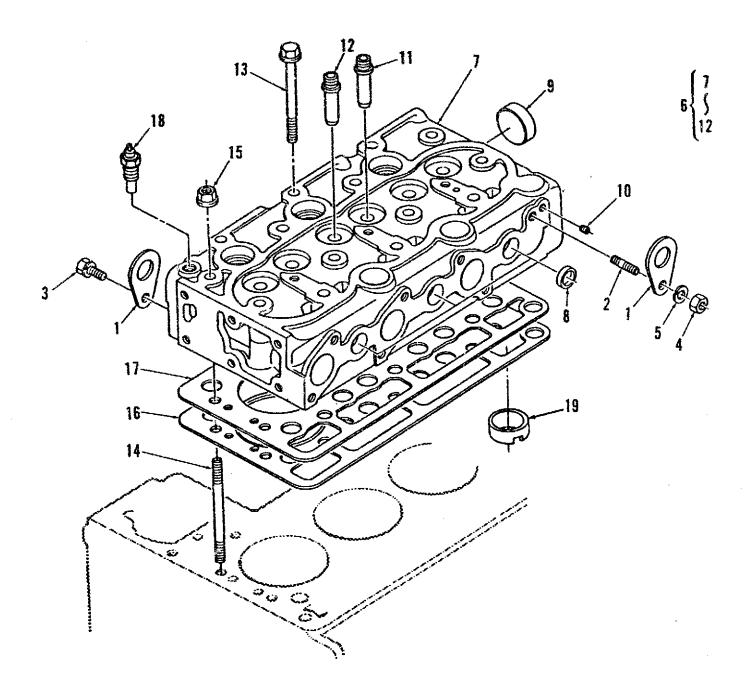
VT-1031

REF. NO.	PART NO.	QTY. USED	PANT DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	185-2060	3	Valve, Inlet	12	185-2292	3	Stud
2	185-2061	3	Valve, Exhaust	13	185-2179	3	Nut, Hex
3	185-2079	6	Spring, Compression	14	185-2184	3	Washer, Flat
4	185-2076	6	Retainer, Spring	15	185-2072	1	Setscrew
5	185-2077	12	Collet, Spring	16	185-2073	6	Washer, Flat
ě	185-2076	3	Seal, Oil - Inlet Valve	17	185-2070	2	Spring, Compression
-	185-2431	3	Seal, Oil - Exhaust Valve	18	185-2368	2	Ring, Retaining
7	185-2080	6	Cap, Valve Stem	19	185-2062	6	Rocker Arm
- 8	185-2215	1	Shaft, Rocker Arm	20	NFS	1	Arm
9	NFS		Shaft	21	185-2063	6	Bushing, Sleeve
10	185-2228	2	Setscrew	22	185-2407	6	Adjusting Screw
11	185-2216	3	Bracket, Support	23	185-2408	6	Nut, Hex



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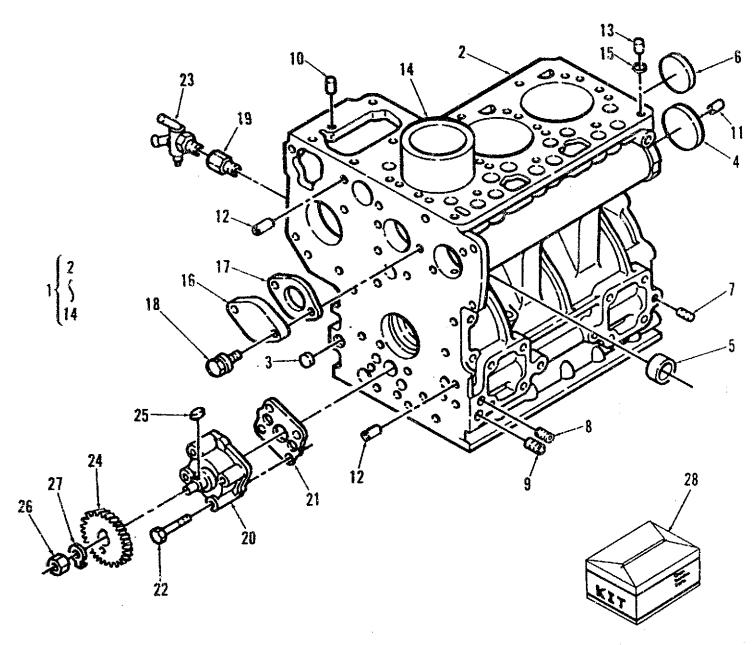
# Cylinder Head



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2414	2	Bracket, Lifting	11	185-2068	3	Guide, Valve - Inlet
2	185-2361	1	Stud	12	185-2069	3	Guide, Valve - Exhaust
3	185~2399	1	Screw, Cap - Hex Head with	13	185~2053	12	Bolt, Hex - Cylinder Head
•	200 0000	_	Lockwasher (M8 $\times$ 1.25 $\times$ 16mm)	14	185-2052	2	Stud
Æ	185-2367	1	Nut, Hex (M8 x 1.25)	15	185-2054	2	Nut; Hex
•	185-2381	1	Washer, Lock - Spring (M8)	16	185-2056	1	Gasket, Cylinder Head
6	185-2049	1	Head, Cylinder	17	185-2057	2	Shim
. 7	NES		Head, Cylinder	18	193-0318	1	Sender, Temperature - Engine
: 8:	185-2413	5	Cup, Sealing				Coolant (E2)
. 9	185-2411	ī	Cup, Sealing	19	185-2477	1	Combustion Chamber
_	185-2188	2	Plug, Pipe - Socket Drive		•		



# Cylinder Block & Oil Pump

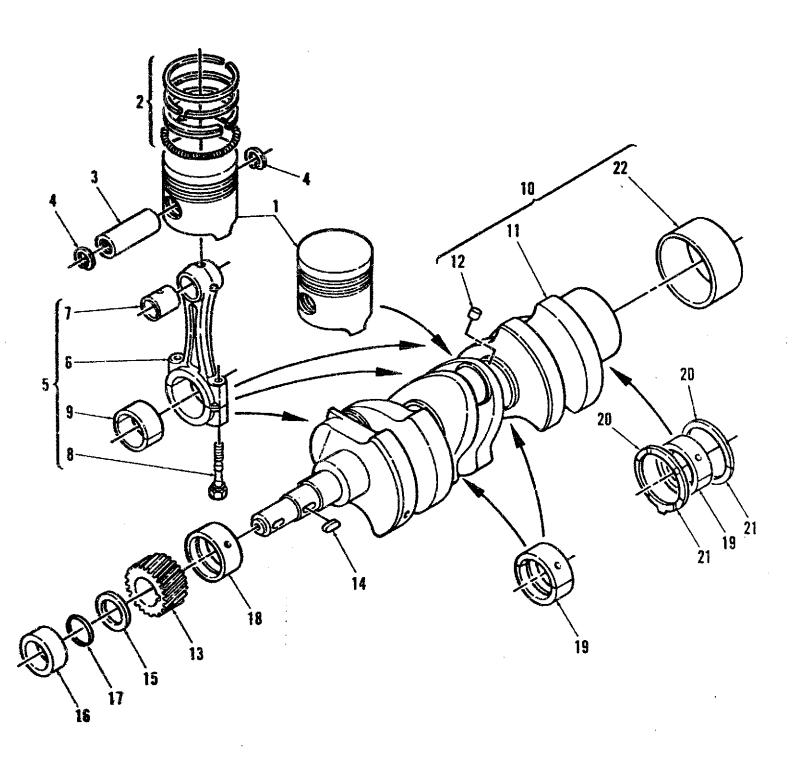


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	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	1	185-2001	1	Crankcase	15	185-2095	1	O-Ring
	2	NFS		Block	16	185-2176	1	Plate, Cover
	3	185-2355	3	Plug, Expansion	17	185-2177	1	Gasket
	4	185-2356	1	Plug, Expansion	18	185-2389	2	Screw, Cap - Hex Head
	5	185-2411	5	Cup, Sealing				(M6 × 1 x 18MM)
	6	185-2412	3	Cup, Sealing	19	185-2229	1	Plug, Hex
	7	185-2188	6	Plug	20	185-2155	1	Pump, Oil
	8	185-2233	3	Plug	21	185-2156	1	Gasket
	9	185-2234	1	Plug	22	185-2409	4	Bolt, Hex with Lockwasher
	10	185-2350	2	Pin, Straight, Headless	23	185-2337	1	Cock, Drain
	11	775-0072	2	Pin, Straight, Headless	24	185-2293	1	Gear, Drive - Oil Pump
	12	185-2115		Pin, Hallow	25	185-2352	1	Key
	13	185-2094		Pin, Hollow	26	185-2365	1	Nut. Hex (M10 x 1.5)
-	14	185-2007	3	Liner, Cylinder	27	185-2382	1	Washer, Lock - Spring (M10)
					28	185-2313	1	Kit, Gasket



# Crankshaft & Piston



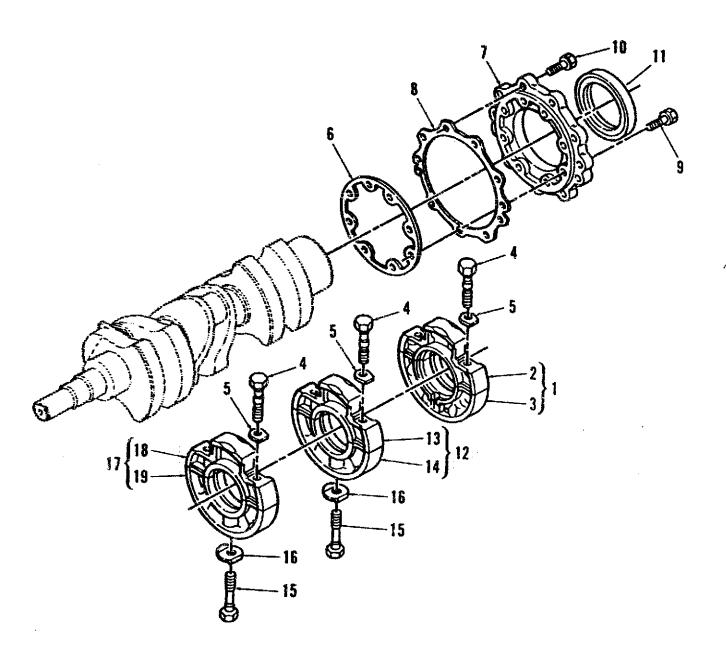


## Crankshaft and Piston

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Piston	10	185-2041	1	Crankshaft
	185-2008	2	Standard (Style I Governor)	11	NFS		Crankshaft
			(#1 & 3 Cylinders Only)	12	NFS		Plug
	185-2009	5.	0.5mm Oversize (Style I	13	185-2043	1	Gear
			Governor) (#1 & 3 Cylinders	14	185-2353	1	Key
			Only)	15	185-2087	1	Slinger, Oil
	185~2434	2	Standard (Style II Governor)	16	185-2250	1	Spacer, Sleeve
			(#1 & 3 Cylinders Only)	17	185-2348	1	O-Ring
	185-2435	2	0.5mm Oversize (Style II	18			Bearing, Crankshaft
			Governor) (#1 & 3 Cylinders		185-2020	1	Standard
		_	Only)		185-2024	1	0.2mm Undersize
	185-2428	1	Standard (Style I & II	_	185-2025	1	0.4mm Undersize
			Governors) (#2 Cylinder	19			Bearing Set
			Only)		185~2021	3	Standard
	185~2429	1	0.5mm Oversize (Style I &		185-2026	3	0.2mm Undersi∠e
			<pre>II Governors) (#2 Cylinder</pre>		185~2027	3	0.4mm Undersize
			Only)	20			Bearing, Thrust
2			Ring Set		185-2022	2	Standard
	185-2010	3	<b>Standard</b>		185-2028	2	0.2mm Oversize
	185~2011	.3	0.5mm Oversize		185~2029	2	0.4mm Oversize
3	185-2015	3	Pin, Piston	21			Bearing, Thrust
A	185-2016	6	Ring, Retaining		185-2023	2	Standard
5	185-2012	3	Rod, Connecting		185-2030	2	0.2mm Oversize
5	NFS		Rod		185-2031	2	0.4mm Oversize
7	185-2017	3	Bearing, Sleeve	22	185-2033	1	Sleeve, Crankshaft
8	185-2018	6	Bolt, Hex - Rod Cap				
9			Bearing Set				
	185-2013	3	Standard				
	185~2019	3	0.2mm Undersize				
	185-2014	3	0.4mm Undersize				



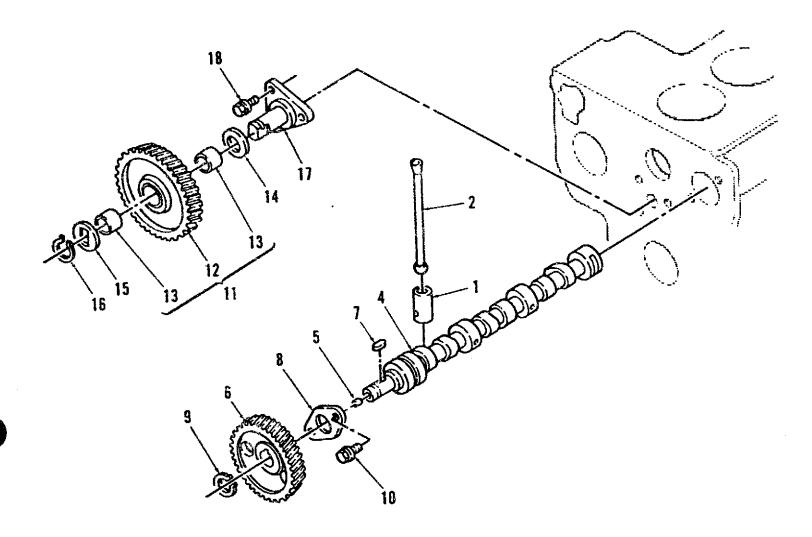
# Main Bearing Holders



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2035	1	Holder, Bearing - Main, Rear	11	185-2055	1	Seal, Oil - Crankshaft, Rear
2	NFS		Holder, Bearing - Half, Upper	12	185-2034	1	Holder, Bearing - Main, Center
3	NFS		Holder, Bearing - Half, Lower	13	NFS		Holder, Bearing - Half, Upper
4	185-2037	4	Bolt, Hex	14	NFS		Holder, Bearing - Half, Lower
5	185-2039	6	Retainer, Bolt/Nut	15	185-2038	2	Bolt, Hex
6	185-2036	1	Gasket	16	185-2040	2	Retainer, Bolt/Nut
7	185-2254	1	Cover Plate - Bearing	17	185-2213	1	Holder, Bearing - Main, Front
8	185-2127	1	Gasket	18	NFS		Holder, Bearing - Half, Upper
9	185-2390	9	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 20mm)	19	NFS		Holder, Bearing - Half, Lower
10	185-2391	8	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 25mm)	•	• .	:	



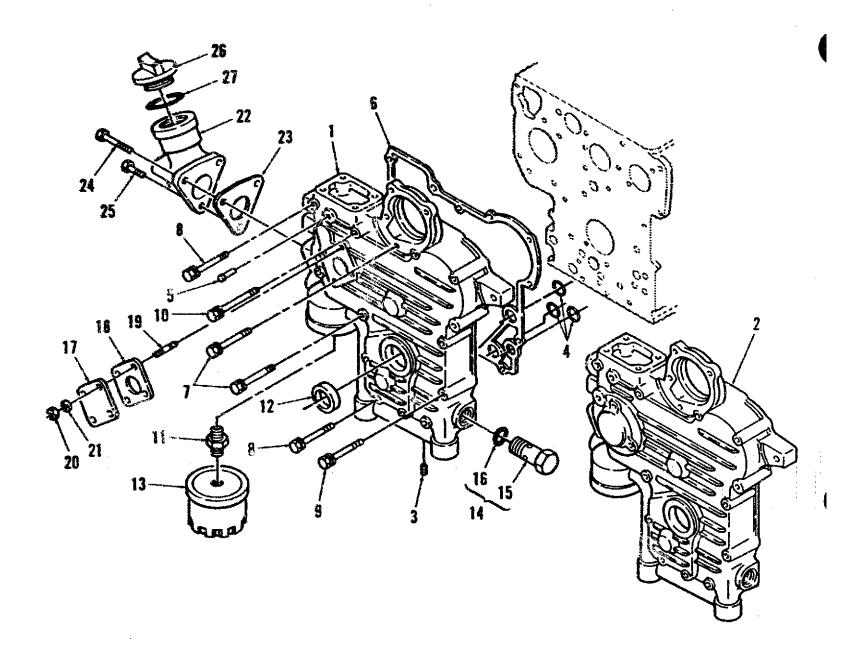
## Camshaft



REF	PART	QTY	PART	REF	PART	QTY	PART
NO.	NO.	USED	DESCRIPTION	NO.	NO.	USED	DESCRIPTION
1 2 4 5 7 8 9	185-2075 185-2074 185-2082 185-2190 185-2086 185-2353 185-2084 185-2369 185-2387	6 6 1 2 1 1 1 1 2	Tappet Rod, Push Camshaft Plug Gear Key Plate, Retaining Ring, Retaining Screw, Cap - Hex Head with	11 12 13 14 15 16 17 18	185-2042 NFS 185-2048 185-2046 185-2047 185-2045 185-2044 185-2388	1 2 1 1 1 3	Gear Gear Bushing, Sleeve Spacer Spacer Ring, Retaining Shaft Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 16mm)



## Gearcase & Oil Filter

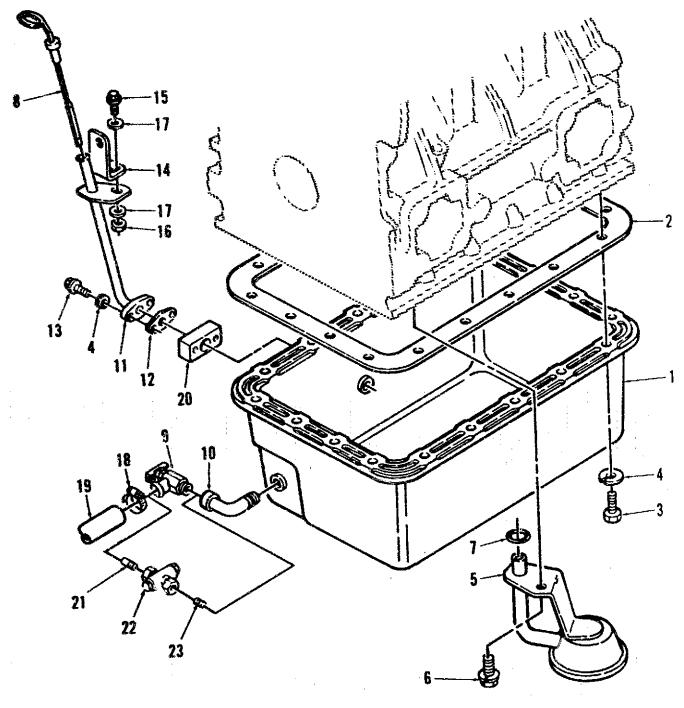


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REF. NO.	PART NO.	OTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	185-2051	1	Gearcase (Style I Governor)	14	185-2157	1	Valve, Relief - Pressure
2	185-2430	1	Gearcase (Style II Governor)	15	NFS		Valve
3	185-2189	2	Plug, Pipe - Socket Drive	16	185-2372	1	O-Ring
4	185-2374	3	O-Ring	17	185-2153	1	Plate, Cover (Style i Gov.)
5	185-2102	1	Pin, Straight	18	185-2104	1	Gasket (Style I Gov.)
6	185-2058	1	Gasket	19	185-2105	4	Stud
7	185-2395	7	Screw, Cap - Hex Head with	20	750-1004	4	Nut, Hex (M6 x 1)
•		-	Lockwasher (M6 x 1 x 60MM)	21	185-2380	4	Washer, Lock - Spring (M6)
B	185-2396	5	Screw, Cap - Hex Head with	22	185-2296	1	Housing, Oil Fill
•			Lockwasher (M6 x 1 x 65MM)	23	185-2309	1	Gasket
9	185-2397	1	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 70MM)	24	185-2394	2	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 50MM)
10	185-2398	1.1	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 75MM)	25	185-2390	1 1	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 20MM)
31:	185-2124	1	Nipple, Pipe - Hex	26	185-2093	1.	Cap, Oil Fill
12	185-2317	1	Seal, Oil - Crankshaft	27	185-2349	1 1	O-Ring
13	185-2123	1	Filter, Oil				

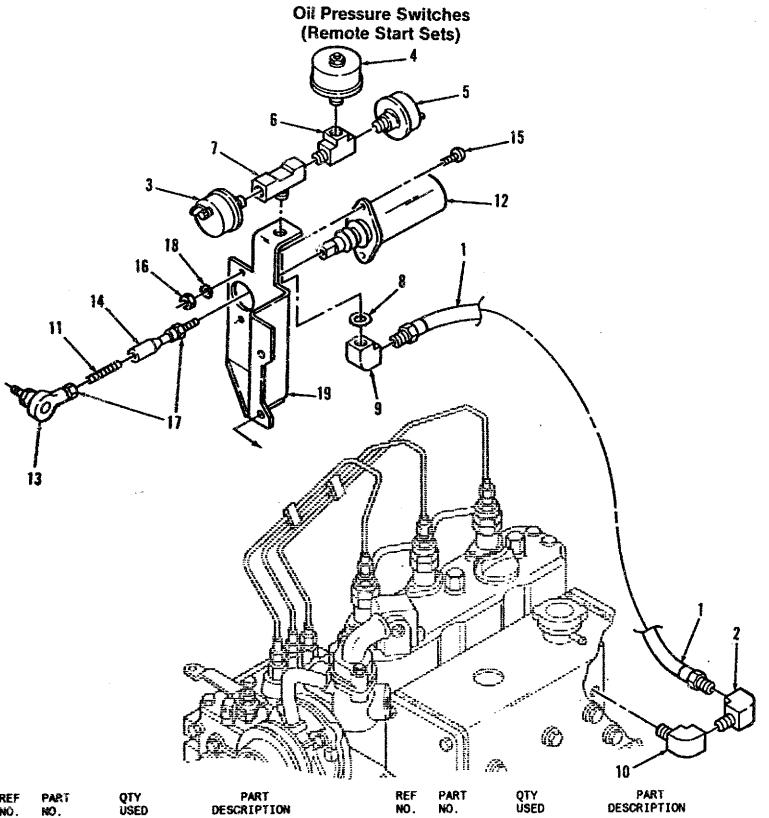


# Oil Pan & Dipstick



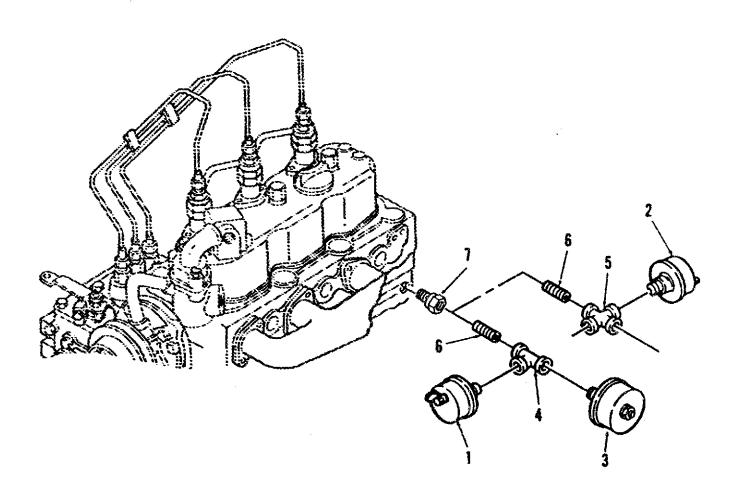
REF	PART	QTY	PART	REF	PART	QTY	PART
NO.	NO.	USED	DESCRIPTION	NO.	NO.	USED	DESCRIPTION
1	185-2281	1	Pan, Oil	14	185-2211	1	Bracket, Oil Indicator Guid
2	185-2212	1	Gasket	15	185-2400	1	Screw, Cap - Hex Head with
3	185-2226	18	Bolt, Hex with Lockwasher				Lockwasher (M8 x 1.25 x 18
4	185-2380	1	Washer, Lock - Spring (M6)	16	185-2366	1	Nut, Hex (M8 x 1.25)
S	185-2220	1	Cup, Pickup - Oil	17	185-2377	· 3	Washer, Flat (M8)
6	185-2399	1	Screw, Cap - Hex Head with	18	503-0131	1	Clamp, Hose
-		_	Lockwasher (M8 x 1.25 x 16mm)	19	503-0891	1	Hose, Rubber
7	185-2371	1	O-Ring	20	123-1628	1	Spacer
ġ	185-2209	ī	Indicator, Oil Level	21	505-0135	1	Nipple, Half - Used Beginni
9	504-0092	. 1	Cock, Valve (used through	1.1			November 1984
٠		7	Hovember 1984)	22	504-0030	1	Valve, Cock - Used Beginnin
10	505-0120	1	Elbow, Pipe - Street, 90'		1.	1.5	November 1984
11	185-2210	ī	Guide, Oil Indicator	23	505-0101	1	Nipple, Close - Used
12	185-2410	2	Gasket				Beginning November 1984
***	800-2036	ž	Screw, Cap - Hex Head		1		

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REF NÖ.	Part No.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	501-0005	1	Line, Fuel - Flexible	8	856-0012	1	Washer, Lock - EIT (7/16")
2	505-0049	1	Elbow, Pipe - Street, 90°	9	502-0005	1	Elbow, Pipe - 90°, Brass
3	309-0159	1	Switch, Pressure (S6)	10			Elbow, Pipe - Street, 90"
_			(Power Latch)		505-0049	1	Used through February 1984
A			Sender, Pressure - Oil (E1)		505-1342	1	Used Beginning March 1984
•			(Not Used On All Applications)	11	520-0939	1	Stud, Solenoid - Stop
	193-0244	1	Single Pole	12	307-2546	1	Solenoid, Stop
	193-0404	1	Double Pole	13	150-1995	1	Ball, Joint
5	100	-	Switch, Pressure (S1)	14	150-1733	1	Ball, Joint
•		1 1 1	(Shutdown)	15	813-0102	2	Screw, RHM (#10~32 x .62")
100	309-0064	1	Single Pole	16	870-0131	2	Nut (#10-32)
	309-0578	1	Double Pale	17	115-0025	2	Nut, Tappet (1/4-28)
6	502-0058	1	Tee, Pipe - Brass (1/8) (Not	18	856-0003	2	Washer, Lock - EIT (#10)
-	002 000%	-	Used On All Applications)	19	150-1992	1	Bracket, Mounting - Stop
Lurrerrieres	502-0057	tion	Tee, Pipe - Brass (1/8)				<b>Softensitio</b> ution or publication of this document by any means; is strictly prohibited.

## Oil Pressure Switches (Manual Start Sets)

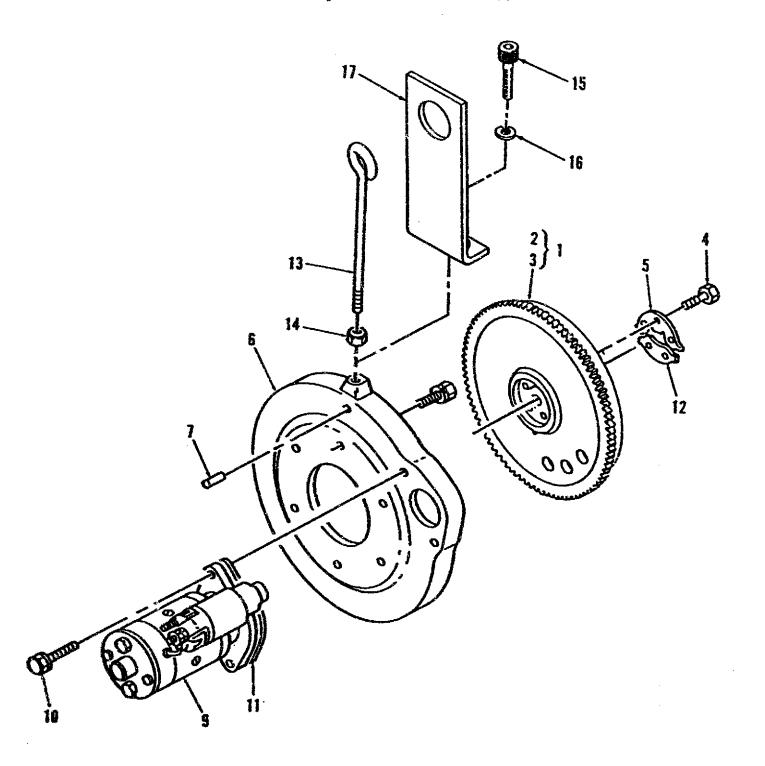


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REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	309-0064	1	Switch, Pressure - Oil (S1)	4	505-0059	1	Tee, Pipe - Iron
			(Shutdown)	5	505-0763	1	Cross, Pipe - Iron
2	309-0159	1	Switch, Pressure - 0il (S6)	6	505-0098	1	Nipple, Pipe - Close
-		•	(Power Latch)	7	502-0917	2	Adapter, Pipe - Brass (Used
3	193-0244	1	Sender, Pressure - Oil (E1)				Beginning March 1984)



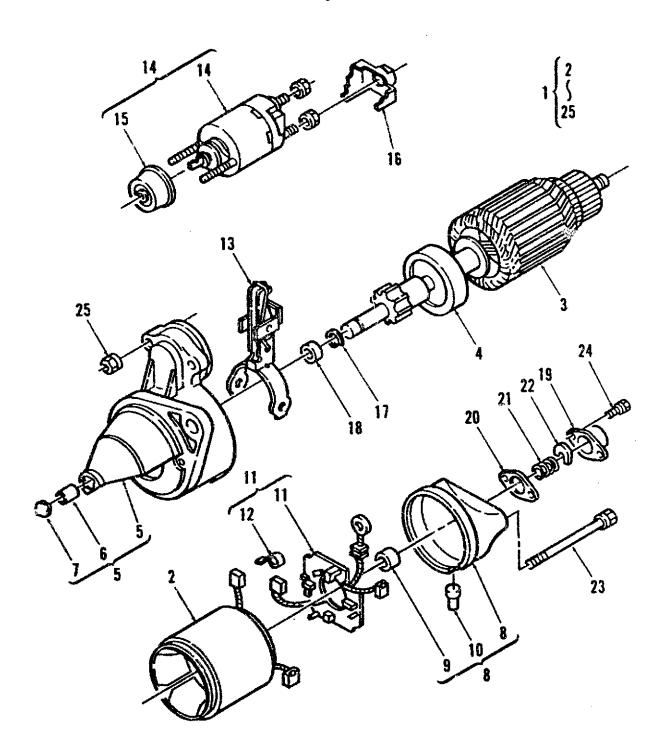
## Flywheel and Starter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2308	1	Flywheel (Includes Gear Ring)	11	185-2314	i	Gasket
2	NFS		Flywheel	12	185-2219	1	Plate, Locking - Bolt/Nut
3	185-2170	1	Gear, Ring	13	403-2214	1	Bolt, Eye (Used Through Spec
4	185-2301	5	Bolt, Hex				A)
S	185-2218	1	Plate, Locking - Bolt/Nut	14	862-0003	1	Nut, Hex (3/8-16) (Used
6	185-2417	1	Adapter, Generator				Through Spec A)
7	775-0072	1	Pin, Straight	15	802-0072	1	Screw, Socket Head
8	185-2178	8	Solt, Hex with Lockwasmer			•	$(3/8-16 \times 1")$
9	185-2116	1	Starter (12VDC) (See Separate	16	850-0050	1. 1	Washer, Lock - Spring (3/8")
<del>-</del>			Figure for Replacement Parts)	17	403-2634	ī	Bracket, Lifting (Begin Spec
10	185-2404	2	Screw, Cap - Hex Head with				8)



# Starter - Exploded View

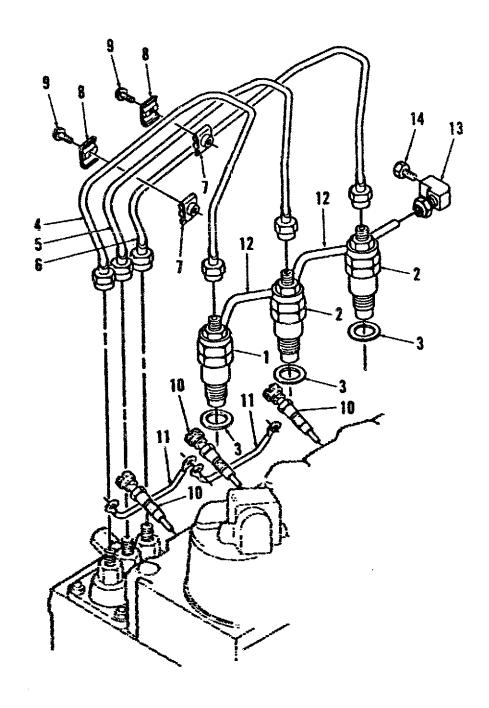


ES-1474

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
*	185-2115	4	Starter (12VDC) (Complete)	14	185-2117	1	Solenoid
2	185-2322	4	Coil, Field	15	185-2331	1	Cover, Plunger
	185-2321		Armature	16	185-2323	1	Insulator, Terminal
3		•	Clutch	17	185-2111	ij	Ring, Retaining
2	165-2319	4	Housing, Drive End	18	185-2195	1	Spacer, Sleeve
5	185-2118	Y		19	185-2332	1	Housing
6	185-2295	1	Bushing, Sleeve	20	185-2333	1	Gasket
7	185-2335	1	Cover	21	185-2325	•	Spring
8	185-2326	1	Housing, Brush End	22	185-2324	•	Clip. Retaining
9	185-2327	3	Bushing, Sleeve	_		ż	Bolt, Hex
10	185-2119	1	Cover	23	185-2328	_	Screw, Machine - Pan Head with
11	185-2329	1	Brush Rig	24	185-2383	2	Lockwasher (M4 x .5 x 14MM)
12	185-2330	4	Spring			_	
130V	ve <b>4</b> 5-2320 neration	1	Lever, Drive	25	185-2334		Nut. Hex istribution or publication of this document ny means, is strictly prohibited.



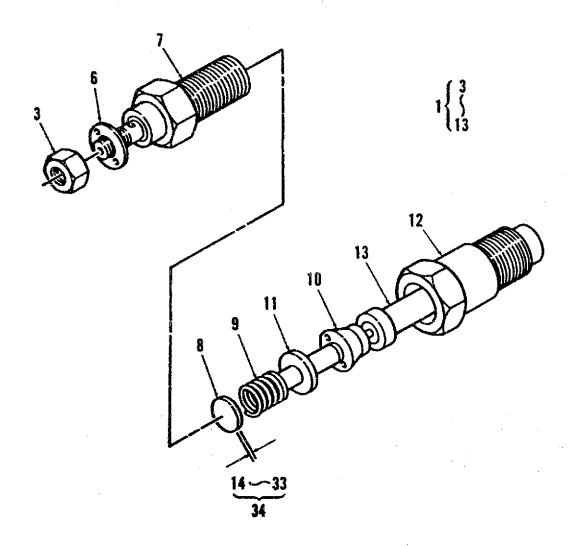
# **Glow Plug & Injection Nozzles**



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2436	1	Nozzle, Injection - Fuel	8	185-2345	2	Clamp
		_	(See Separate Page for Components)	9	185-2385	2	Screw, Machine - Pan Head with Lockwasher
2	185-2436	2	Nozzle, Injection - Fuel				$(M5 \times .8 \times 20mm)$
_			(See Separate Page for	10	185-2289	3	Plug, Glow (12 VDC)
			Components)	11	185-2172	2	Lead, Flectrical
3	185-2294	3	Gasket	12	185-2437	1	Tube, Fuel - Overflow
4	185-2159	1	Line, Fuel - Injection	13	502-0886	1	Elbow, Tube to Pipe, 90°
5	185-2160	1	Line, Fuel - Injection	14	502-0175	1	Adapter, Pipe - Hex (Used
6	185-2224	1	Line, Fuel - Injection		:		Beginning November 1984)
•	105-2244	3	C Same				



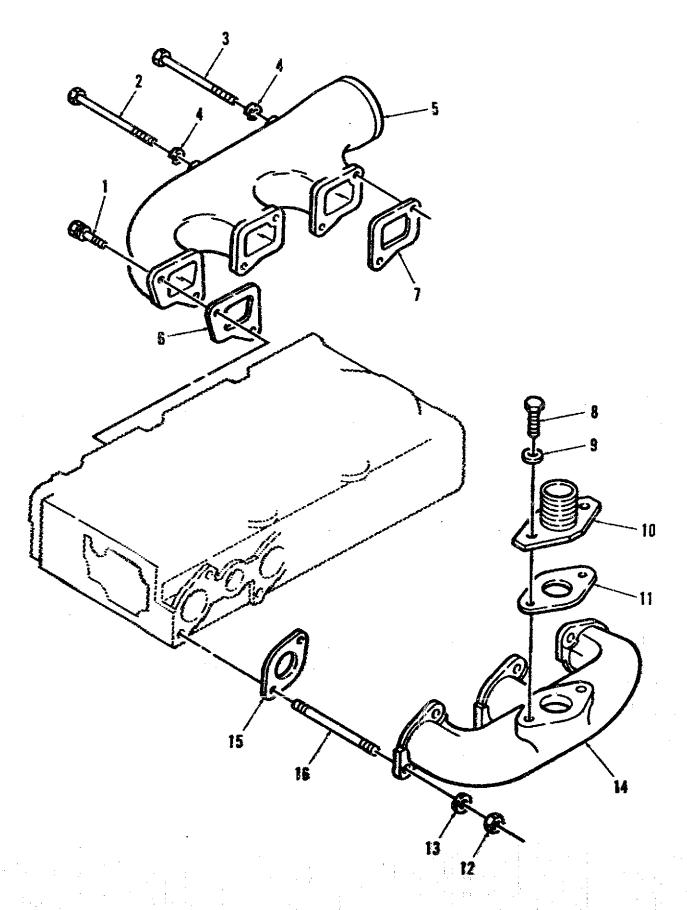
# Injection Nozzle - Components



REF NG.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO	QTY USED	PART DESCRIPTION
1	185-2436	1	Nozzle, Injection (Complete)	20	185-2138	1	Shim (1.30mm)
3	185-2107	1	Nut, Hex	21	185-2139	1	Shim (1.35mm)
Ē	185-2109	1	Washer, Flat	22	185-2140	1	Shim (1,40mm)
7	NFS		Screw, Adjusting - Pressure	23	185-2141	1	Shim (1.45mm)
8.	185-2099	1	Shim	24	185-2142	1	Shim (1.50mm)
9	185-2098	1	Spring	25	185-2143	1	Shim (1.55mm)
10	185-2101	1	Spacer	26	185~2144	1	Shim (1.60mm)
11	185-2097	1	Spindle	27	185-2145	1	Shim (1.65mm)
12	185-2100	1	Holder, Nozzle	28	185-2146	1	Shim (1.70mm)
13	185-2459	1	Nozzle, Injection - Fuel	29	185-2147	1	Shim (1.75mm)
14	185-2132	ī	Shim (1.00mm)	30	185~2148	1	Shim (1.80mm)
15	185-2133	ĩ	Shim (1.05mm)	31	185-2149	1	Shim (1.85mm)
16	185-2134	ī	Shim (1.10mm)	32	185-2150	1	Shim (1.90mm)
17	185-2135	ī	Shim (1.15mm)	33	185-2151	1	Shim (1.95mm)
18	185-2136	î	Shim (1.20mm)	34	185-2444	1	Shim Pkg
19	185-2137	· i	Shim (1.25mm)				



## Inlet/Exhaust Manifold



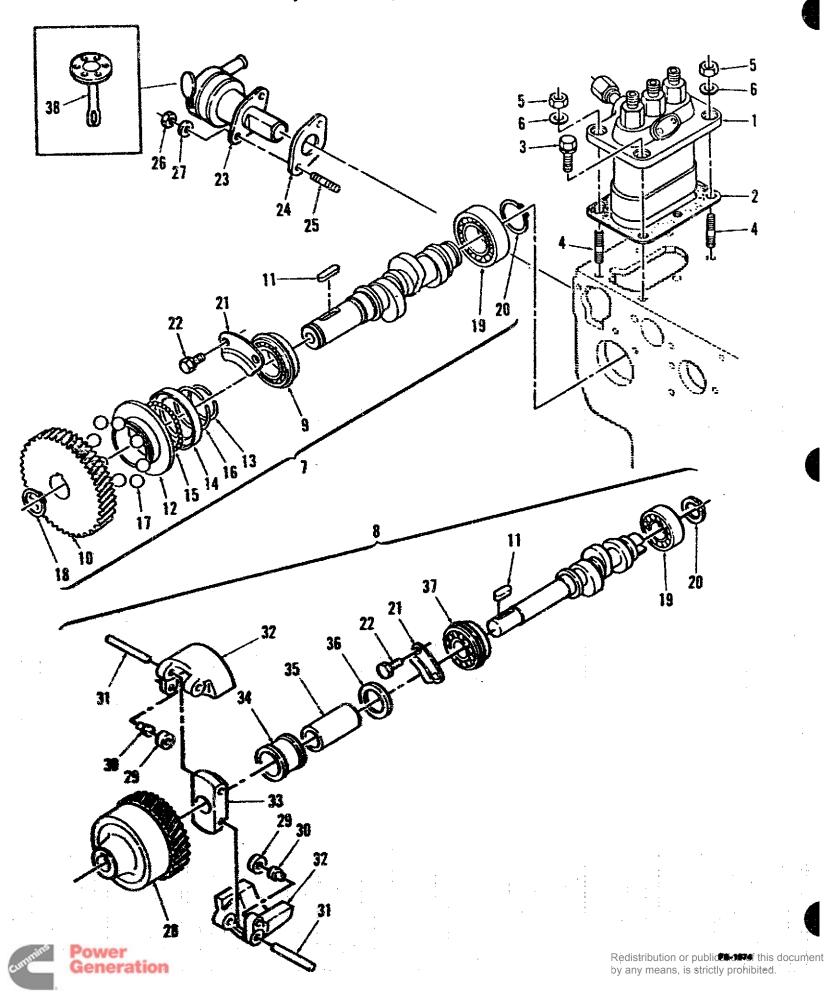


EXS-1115

## Inlet/Exhaust Manifold

REF No.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2390	4	Screw, Cap - Hex Head with	9	526-2120	2	Washer, Flat (M10)
			Lockwasher (M6 x 1 x 20mm)	10	154-2485	ī	Adapter, Exhaust
2	185-2253	1	Bolt, Hex	11	185-2203	1	Gasket, Exhaust Manifold
3	185-2225	1	Bolt, Hex	12	860-2007	6	Nut, Hex (M6)
4	850-2006	2	Washer, Lock - Spring (M6)	13	850-2006	6	Washer, Lock - Spring (M6)
5	185-2307	1	Manifold, Inlet	14	185-2214	ĭ	Manifold, Exhaust
6	185-2129	ī	Gasket	15	185-2131	3	Gasket
7	185-2130	Ž	Gasket	16	185-2227	6	Stud
8	815-0585	2	Screw, Cap - Hex Head (M10 x 1.25 x 20mm)	10	100 2121	Ū	Stau :

Fuel System -Injection Pump & Driveshaft

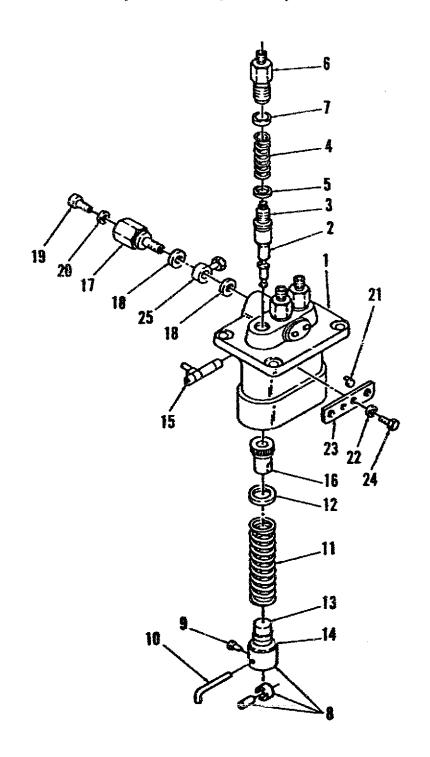


### Fuel System -Injection Pump and Driveshaft

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Pump, Injection - Fuel (See	19	185-2315	1	Bearing, Ball
			Separate Page for Components)	20	185-2370	1	Ring, Retaining
	185~2221	1	Spec A	21	185-2085	1	Plate, Retaining
	185-2461	1	Spec B	22	185-2386	2	Screw, Cap - Hex Head with
2	185-2223	4	Shim (0.15mm)				Lockwasher (M6 $\times$ 1 $\times$ 12mm)
3	185-2402	2	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 22mm)	23	185~2302	1	Pump, Fuel (also shown in Fuel System - Filter & Pump)
4	185-2106	2	Stud (M8 x 1.25)	24	185-2125	1	Gasket
5	185-2367	2	Nut, Hex (M8 x 1.25)	25	185-2359	2	Stud
6	185-2381	2	Washer, Lock - Spring (MB)	26	750-1004	2	Nut. Hex $(M6 \times 1)$
7	185-2083	1	Shaft Assembly, Fuel (Style	27	185-2380	2	Washer, Lock - Spring (M6)
•			I Governor)	28	185-2448	1	Gear
8	185-2446	1	Shaft Assembly, Fuel (Style	29	185-2443	2	Roller
-		<del>-</del>	II Governor)	30	NFS	2	Pin, Straight, Headed
9	185-2316	1	Bearing, Ball	31	185-2452	2	Pin, Straight, Headless
10	185-2158	1	Gear	32	185-2454	2	Weight, Governor (Includes
11	185-2354	1	Key				Pivot Pins)
13	185-2162	ĩ	Retainer, Ball - Governor	33	185-2453	1	Holder, Weight
13	185-2163	1	Ring, Retaining	34	185-2449	1	Sleeve
14	185-2164	ī	Race, Ball - Governor	35	185-2451	1	Collar
15	185-2357	30	8all	36	185-2450	1	Washer, Thrust
16	185-2165	1	Ring, Retaining	37	185-2447	1	Bearing, Ball
17	185-2358	7	Ball	38	185-2222	1	Diaphragm, Fuel Pump
18	185-2369	1	Ring, Retaining	- <del>-</del>		-	



# **Injection Pump - Components**

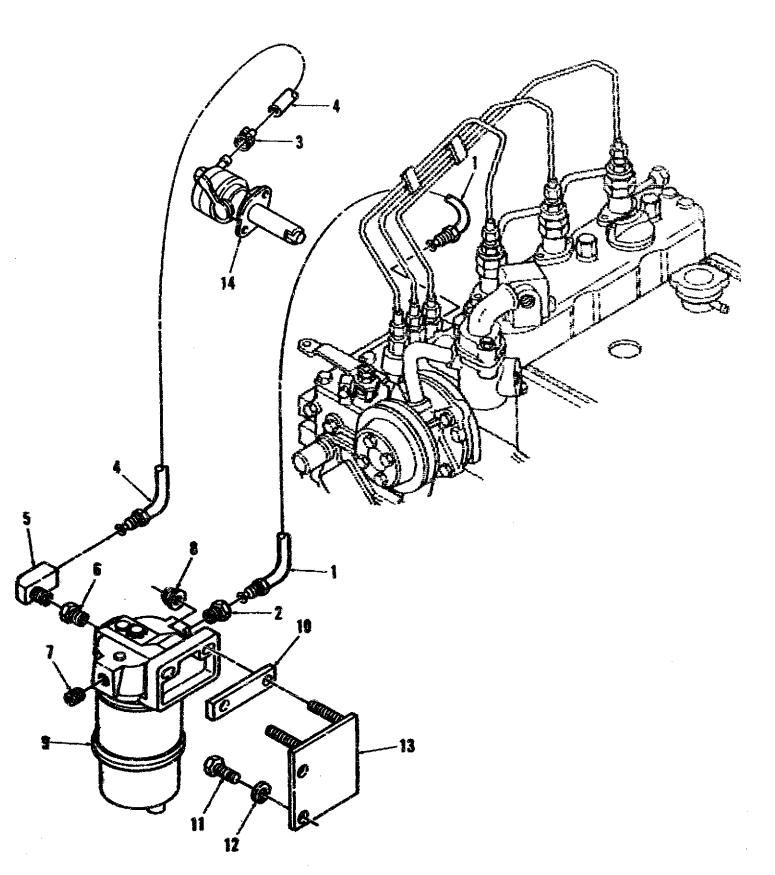


REF NQ.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	NFS		Housing, Pump	14	NFS		Shim
2	NES		Plunger, Delivery Valve	15	NFS		Shaft, Fuel Control
3	NFS		Valve, Delivery	16	NFS		Sleeve, Fuel Control
Ă	NFS		Spring	17	NFS		Vent, Air
5	185-2196	3	Gasket	18	185-2197	2	O-Ring
6	NFS	-	Connector, Fuel Line	19	NFS		Screw, Cap - Hex Head (Air
7	185-2198	3	0-Ring				Vent)
8	NFS	•	Tappet (Includes Roller and Shaft)	20 21	195-2318 NFS	1	O-Ring Collar
. 9	NFS		Pin, Shouldered	22	NFS	•	Washer, Lock - Spring
10	NFS		Pin, Roller Shaft	23	NFS .		Plate, Adjusting
11	NES		Spring	24	NFS		Screw, Cap - Hex Head
12	NES	;	Seat, Spring - Upper	25	185-2415	. 1 .	Adapter, Line - Fuel
ar de fre	NFS ower Genera	tion	Seat, Spring - Lower				Redistribution or publication of this document by any means, is strictly prohibited.

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Fuel System - With Mechanical Pump and Filter (Spec A and B)







# Fuel System - With Mechanical Pump and Filter (Spec A and 8)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF MO.	PART NO.	QTY USED	PART DESCRIPTION
1	501-0005	1	Line, fuel - Flexible	10	149-1922	1	Spacer - Fuel Filter Mounting
2	502-0033	1	Adapter, Pipe - Hex	11	815-0600	2	Screw, Cap - Hex Head
3	503-0685	1	Clamp, Hose			-	$(M10 \times 1.25 \times 25mm)$
4	501 0487	1	Line, Fuel - Flexible	12	850-2010	2	Washer, Lock - Spring (M10)
5	502-0020	1	Pipe, Elbow - Street, Brass,	13	149-1920	ĩ	Plate, Mounting - Fuel Filter
_		•	90.	14	185-2302	i	Pump, Fuel (Also Shown in
6	502-0029	1	Bushing Reducer - Rex		200 2002	•	Fuel System - Injection Pump
7	505-0180	i	Plug, Pipe - Square Socket				ruer system singestron rump
8	870-0257	2	Nut, Self-locking - Hex Washer Head (5/16-18)				
9			Filter/Separator, Fuel - Pressure Type (Sea Separate Group for Components)				•
	149-1908-04	1	Without Electric Fuel Heater and Bowl Heater				
	149-1908-06	1	With Electrica Fuel				

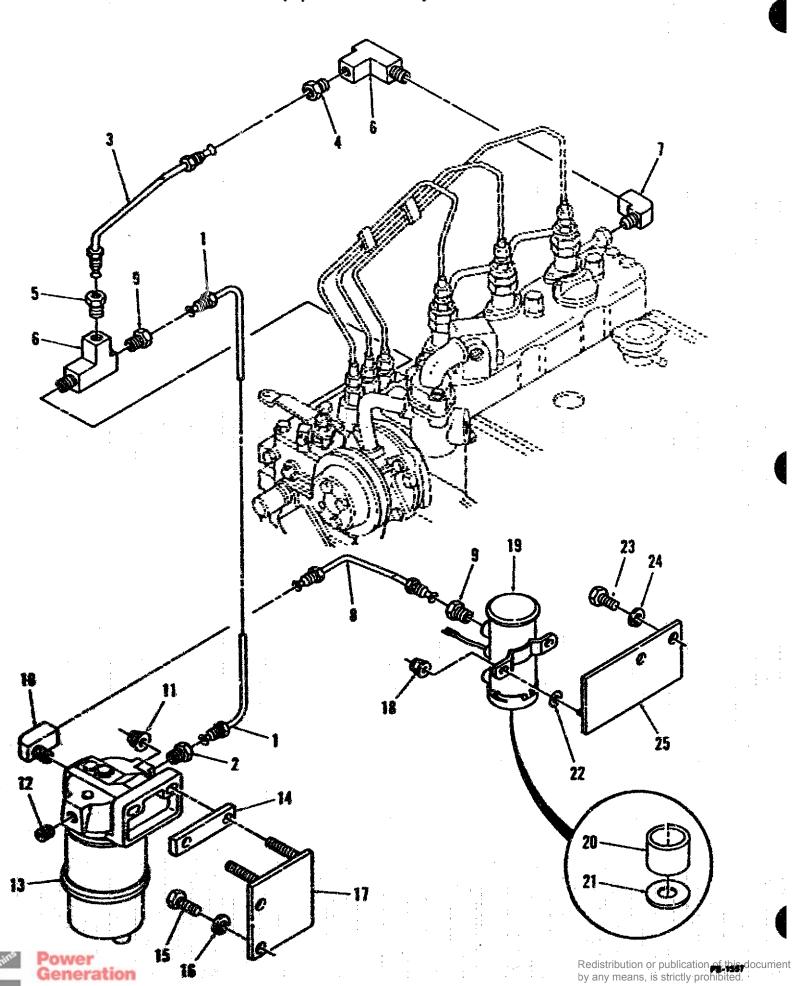


Fuel System - With Mechanical Pump and Filter (Begin Spec "C") 15 Redistribution or publication of this document by any means, is strictly prohibited.

# Fuel System - With Mechanical Pump and Filter (Begin Spec "C")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	501-0005	1	Line, Fuel - Flexible	11	850-2010	2	Washer, Lock - Spring (M10)
2	501-0487	1	Line. Fuel - Flexible	12	149-2108	1	Bracket, Mounting - Fuel
3	503-0685	1	Clamp, Hose				Filter
4	185-2302	1	Pumo Fuel	13	502-0028	3	Plug, Drain
5	502-0020	ī	Elbow, Pipe - Street, 90"		149-2234	i	Vent. Air
6	502-0029	1	Bushing, Reducer	15	870-0257	2	Nut, Self-locking - Hex
7	502-0041	ī	Connector, Male - Inverted.			_	Washer Head (5/16 × 18)
-		_	90"	16	149-1922	1	Spacer, Mounting - Fuel Filte
8	149-2100	1	Filter Assembly, Fuel	17	149-1920	ĩ	Plate, Mounting - Fuel Filter
9	149-2106	1	Element, Filter - Fuel			_	
10	815-0600	\$	Screw, Cap - Hex Head				

Fuel System - With Electrical Pump and Filter (Spec A and B)

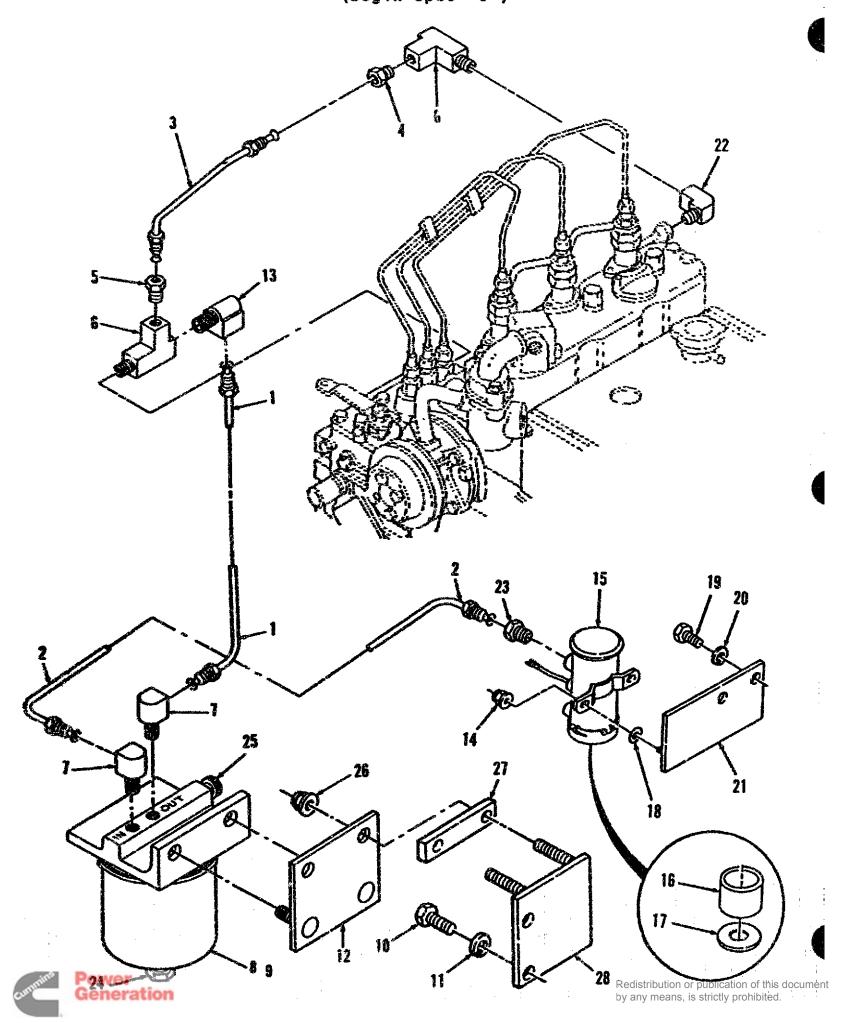


# Fuel System - With Electrical Pump and Filter (Spec A and B)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF MÖ.	PART NO.	QTY USED	PART DESCRIPTION
1	149-1945	1	Line, Fuel	14	149-1922	1	Spacer, Filter - Fuel
2	502-0033	1	Adapter, Pipe - Hex	15	815-0586	Ź	Screw, Cap - Hex Head
3	149-1944	1	Line, Fuel				$(M10 \times 1.25 \times 16mm)$
4	502-0281	1	Adapter, Pipe - Hex with		850-2010	2	Washer, Lock - Spring (M10)
			Restrictor Plug	17	149-1920	1	Plate, Mounting - Fuel Filter
5	502-0097	1	Adapter, Pipe - Hex	18	870-0212	2	Nut, Self-locking - Hex
6	502-0058	2	Pipe, Tee				Washer Head (1/4-20)
?	502-0886	1	Elbow, Tube to Pipe - 90°	19	149-1828	1	Pump, Fuel - Electric (12 VDC)
8	149-1932	1	Line, Fuel	20	149-1445	1	Filter, Pump - Fuel
9	502~0003	2	Adapter, Pipe - Hex	21	149-1446	1	Gasket, Cover - Fuel Pump
10	502-0041	Ã	Pipe, Elbow - Street, 90°.	22	856-0006	2	Washer, Lock - EIT (1/4)
		-	Brass	23	815-0586	2	Screw, Cap - Hex Head
11	870-0257	2	Nut, Self-Locking - Hex			_	(M10 x 1.25 x 16mm)
WE 15		***	Washer Head (5/16-18)	24	850-2010	2	Washer, Lock - Spring (M10)
12	505-0180	1	Plug, Pipe - Square Socket Drive	25	149-1921	1	Plate, Mounting - Fuel Pump
13			Filter/Separator, Fuel -				
			Pressure Type (See Separate				
			Group for Components)				
	149-1908-04	1	Without Electric Fuel Heater and Bowl Heater				
	149-1908-06	1	With Electric Fuel Heater				



Fuel System - With Electrical Pump and Filter (Begin Spec "C")

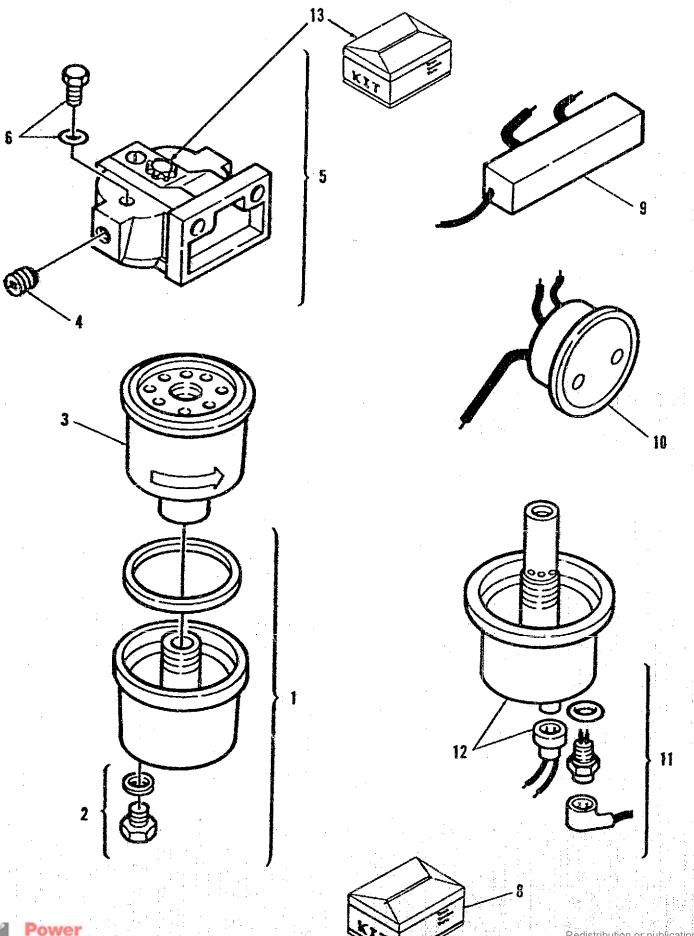


# Fuel System - With Electrical Pump and Filter (Begin Spec "C")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	149-2102	1	Line, Fuel - Flexible	15	149-1828	1	Pump, Fuel - Electric (12 VDI
2	149-2101	1	Line, Fuel - Flexible	16	149-1445	1	Filter, Pump - Fuel
3	149-1944	1	Line, Fuel - Flexible	17	149-1446	1	Gasket, Cover - Fuel Pump
4	502-0281	l	Adapter, Pipe - Hex with	18	856-0006	2	Washer, Lock - EIT (1/4)
-			Restrictor Plug	19	815-0586	2	Screw, Cap - Hex Head
5	502-0097	1	Adapter, Pipe - Hex				$(M10 \times 1.25 \times 16mm)$
. 6	502-0058	2	Pipe, Tee	20	850-2010	2	Washer, Lock - Spring (M10)
7	502-0041	2	Connector, Male - Inverted,	21	149-1921	1	Plate, Mounting - Fuel Pump
			90*	22	502-0886	1	Elbow, Tube to Pipe - 90°
8	149-2100	1	Filter Assembly, Fuel	23	502-0003	1	Adapter, Pipe - Hex
9	149-2106	1	Element, Filter - Fuel	24	502-0028	1	Plug, Drain
10	815-0600	2	Screw, Cap - Hex Head	25	149-2234	1	Vent, Air
		_	(M10 × 1.25 × 25mm)	26	870-0257	2	Nut, Self-locking - Hex
11	850-2010	2	Washer, Lock - Spring (M10)				Washer Head (5/16-18)
12	149-2108	1	Bracket, Mounting - Fuel	27	149-1922	1	Spacer, Mounting - Fuel Filt
		-	Filter	28	149-1920	1	Plate, Mounting - Fuel Filte
13	502-0002	1	Elbow, Male - Inverted				
14	87C-0212	2	Nut, Self-locking - Hex Washer Head (1/4-20)				



# Fuel/Water Separator





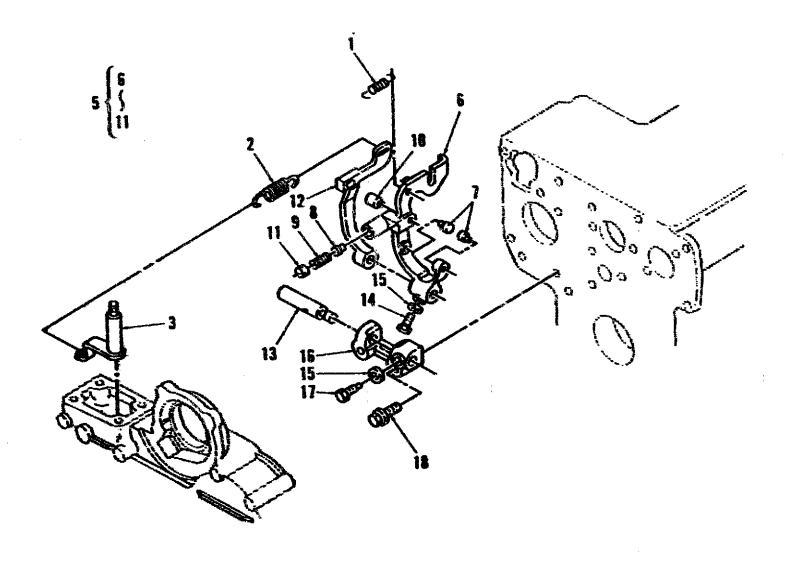
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## Fuel/Water Separator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Filter/Separator, Fuel Complete (Pressure Applications)	8	149-2045	1	Seal Kit, Separator - Fuel/Water (Includes all O-Ring Seals and Plunger)
	149-1908-04	1	Without Fuel and Bowl Heaters	9	149-1971	1	Alarm/Tight - Water Sensor (Rectangular)
	149-1908-06	1	With Fuel and Bowl Heaters	10			Alarm/Tight - Water Sensor
1	149-2046	1	Bowl, Metal - Replacement				(Round)
			(Includes Seals, Plugs, and		149-1972	1	12 Volt DC
			Drain Assembly)		149-2048	1	24 Volt DC
2	149-1953	1	Orain Assembly (Includes  Knob and Seal)	11	149-2044	1	Probe Assembly (Includes Connector and O-Ring Seal)
3	149-1914-04	1	Element, Filter (Includes O-Ring Seal) (2 Micron)	12			Heater Assembly (Includes Metal Bowl)
4	502-0180	1	Plug, Pipe - Square Socket		149-1978	1	12 Volt DC
			Dr ive		149-1970	1	24 Volt DC
5	149-1949	1	Head Assembly, Replacement (Includes Vent Plug, O-Ring Seals, Pump Assembly and Tube)	13	149-2047	1	Replacement Kit - Pump (Includes Knob, Shaft, Plunger, Ball and Ring) (The only way to get a
6	149-1952	1	Plug, Vent (Includes Seal)				replacement knob!)



## Governor

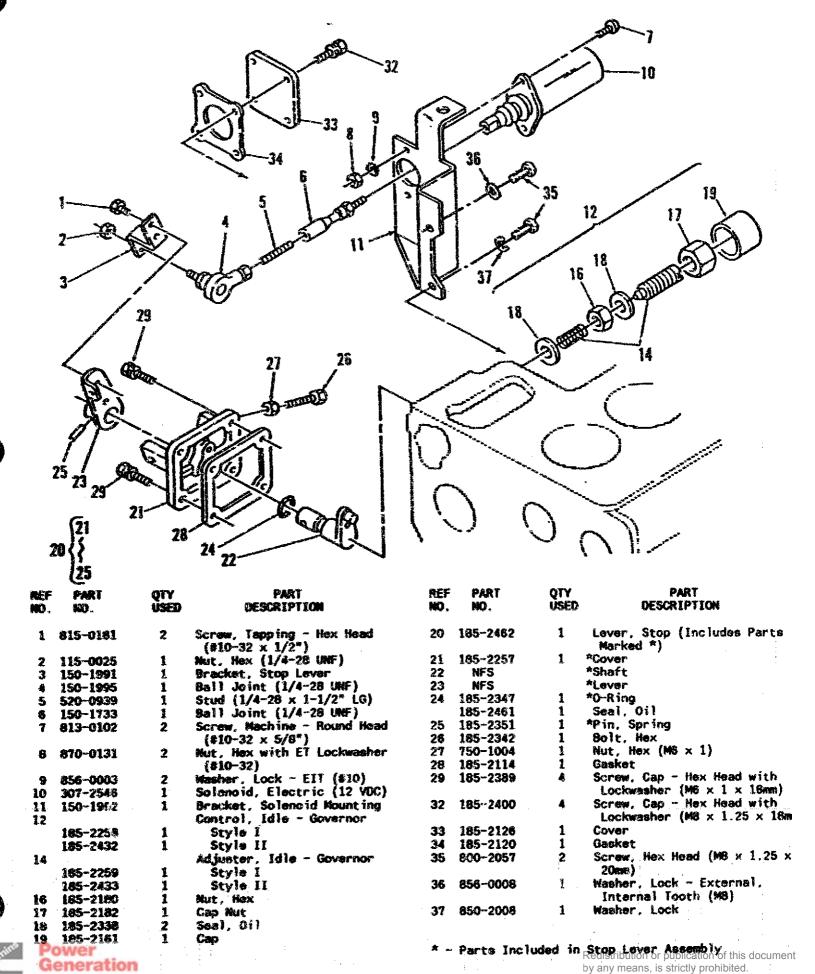


REF NO.		QTY	PART DESCRIPTION	REF HD.	PART NO.	QTY USED	PART DESCRIPTION
: 1	185-2103	1	Spring	9	NFS		Spring
2		_	Spring, Governor	10	NFS		Pivot
_			Style I	11	NFS		Screw, Adjusting
	185~2466	1	50 Hz	12	185-2262	1	Lever, Governor (Style I Gov.)
	185-2427	ī	60 Hz		185-2442	· 1	Lever, Governor (Style II
	185-2440	ĩ	Style II			_	Gov.)
3	185-2261	ī	Lever, with Shaft - Governor	13	185-2166	1	Shaft
5	185-2310	ī	Lever Assembly, Governor (Style I Gov.)	14	718-1006	ĩ	Screw, Cap Hex Head (M5 x .5 x 16mm)
	185-2441	1	Lever Assembly, Governor (Style II Gov.)	15 16	185-2379 185-2167	1	Washer, Lock - Spring (M5) Holder, Lever - Governor
6	NES		Lever .	17	185-2173	1	Bolt, Hex
7	NFS		Follower, Cam	18	185-2392	2	Screw, Cap - Hex Head with
8	NFS		Plug			_	Lockwasher (M6 x 1 x 28mm)

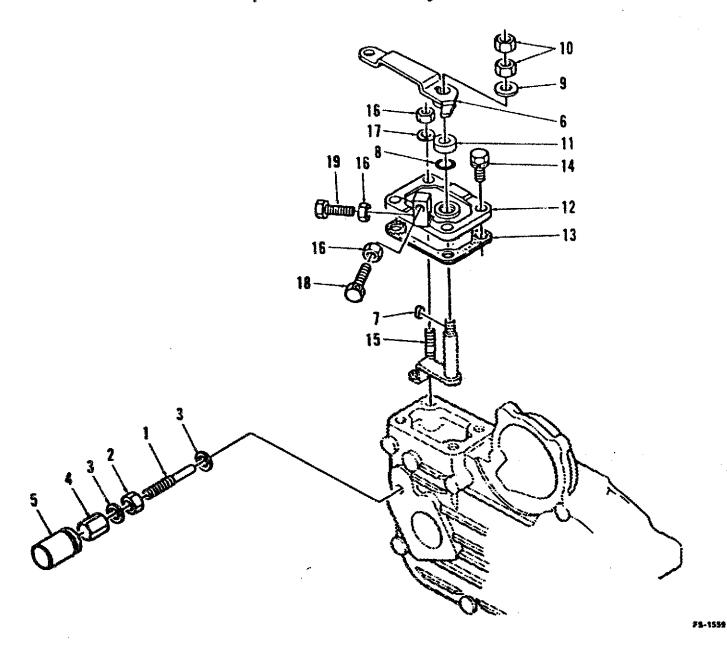
NOTE: See introduction for governor style identification.



#### Stop Assembly



## **Speed Control Assembly**

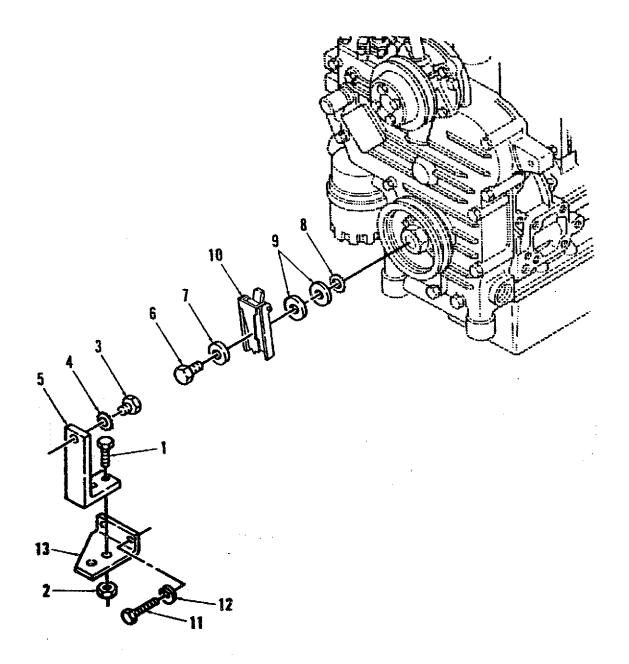


NEF NO.	PART NO.	QTY USED	PART Description	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Screw, Adjusting	10	185-2364	2	Nut, Hex (M6 x 1)
	185-2260	1	Style I	11	185-2169	1	Bearing, Sleeve
	185-2438	ī	Style II	12	185-2263	1	Housing, Control - Speed
9	185-2248	1	Nut . Hex	13	185-2168	1	Gasket
3	185-2284	3	Seal, Oil	14	185-2390	3	Screw, Cap - Hex Head with
Ä	185-2282	ì	Cao Rut				Lockwasher (M6 x 1 x 20mm)
5	185-2283	ī	Can	15	185-2105	1	Stud
6	185-2264	1	Lever, Control - Speed	16	750-1004	3	Nut, Hex $(M6 \times 1)$
7	185-2187	ī	Key	17	185-2380	1	Washer, Lock - Spring (M6)
8	185-2373	1	0-Ring	18	815-0649	1	Bolt, Hex - Lever Stop
9.	185-2376	ī	Washer, Flat (M6)	19	185-2439	1	Bolt, Hex - Lever Stop

NOTE: See Introduction for governor style identification.



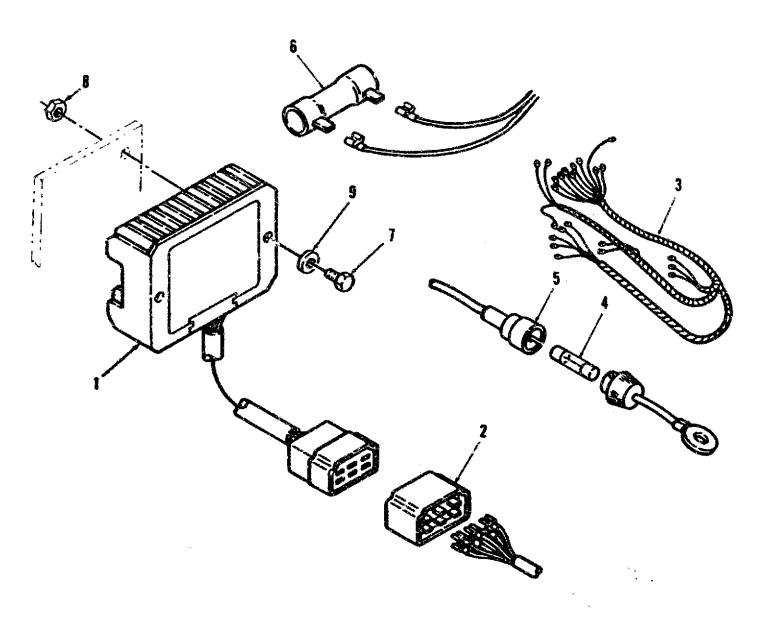
# **Overspeed Switch**



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0015	2	Screw, Self-locking - Hex	7	850-2008	1	Washer, Lock - Spring (M8)
-	•••		Washer Head (1/4-20 x 3/4")	9	856-0008	1	Washer, Lock - EIT (5/16")
2	870~0212	2	Nut, Self-locking - Hex	9	526-0113	2	Washer, Flat (5/16")
-	515 5225	_	Washer Head (1/4-20)	10	150-0717	1	Switch, Overspeed
3	150-2011	1	Point, Contact - Electrical (1/4-20 x 3/8")	11	800-2044	2	Screw, Cap - Hex Head (M6 x 1.0 x 70mm)
4	853~0013	1	Washer, Lock - ET (1/4")	12	850-2006	2	Washer, Lock - Spring (M6)
5	150-2009	ī	Bracket, Support - Overspeed Contact (Normetallic)	13	150-2010	1	Bracket, Support - Overspeed Switch
6	800-2057	1	Screw, Cap - Hex Head			٠.	



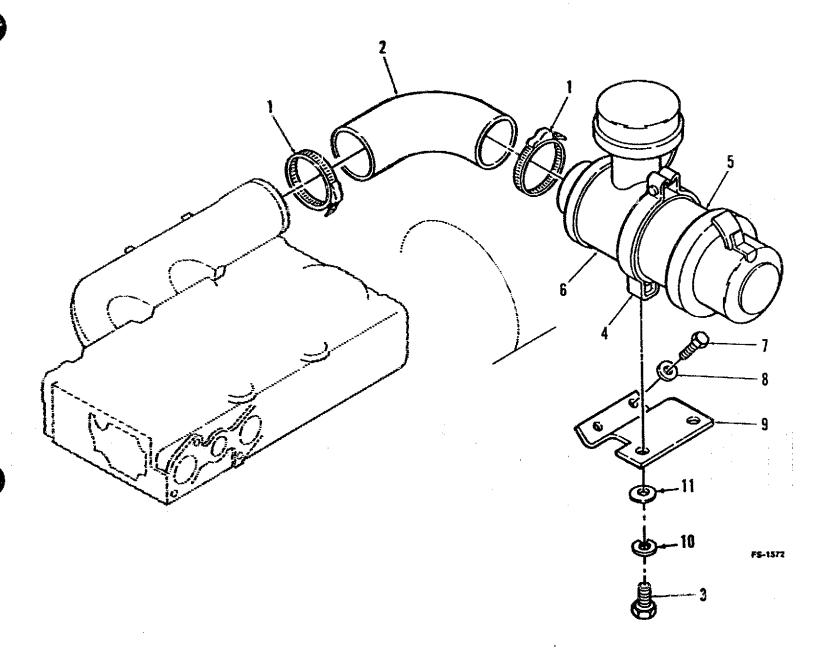
# Voltage Regulator & Wiring Harness



REF MG.	PARY NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2252	1	Regulator, Voltage (12 VDC)	5	321-0267	1	Holder, Fuse
•	815-0236	Ä	Screw, Tapping - Hex Head (5/16-18 x 5/8")	6	304-0776	1	Resistor, Fixed, Wirewound (R1) 5 Ohm, 10 Watt (Part
2	185-2424	1	Adaptor, Electrical Connector				of Engine to Control
3			Harness, Wiring - Engine to	معن	***	_	Wiring Harness)
			Control	7	815-0544	2	Screw, Round Head Machine -
,	338-1762	1	Manua I				Gross-Recessed with Internal
			Remote				Teeth (#6-32 x 1/2)
	338-1825-81	1	Without Overspeed Switch	5	870-0050	2	Nut, Self-Locking (6-32)
	338-1825-01	1	With Overspeed Switch	9	526~1002	2	Washer, Flat (#6)
4	321-0113	1	Fuse, Cartridge (30 Amp, 32 VGC, Sio Blo)				



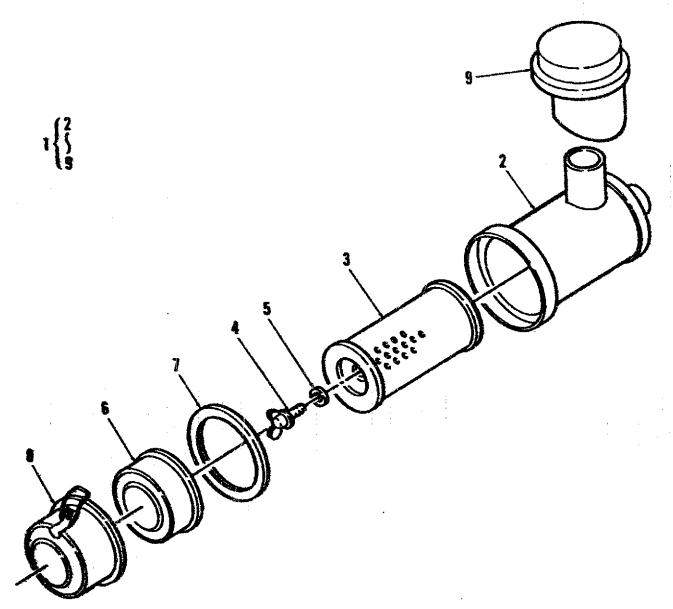
## Air Cleaner



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0365	2	Clamp, Hose	8	526~0018	2	Washer, Flat (17/64" ID x
5	503-1316	1	Hose, Elbow - Preformed				5/8" OD x 1/16" Thk)
3	800-2055	2	Screw, Cap - Hex Head (MB x 1.25 x 16mm)	9	140-1902	1	Bracket, Mounting - Air Cleaner
	185-2199	4	Band, Mounting - Air Cleaner	10	850-2008	2	Washer, Lock (M8)
=	185-2201	î	Cushion	11	526-2100	2	Washer, Flat (M8)
<b>a</b>		•					• •
£	185-2206	I.	Cleaner Assembly, Air (See Separate Page for Components)				
7	815-0315	2	Screw, Tapping - Hex Washer Head (1/4-20 x 1/2") or use -				
	821-0010	2	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2")				
	1 1			* *			



# Air Cléaner - Components

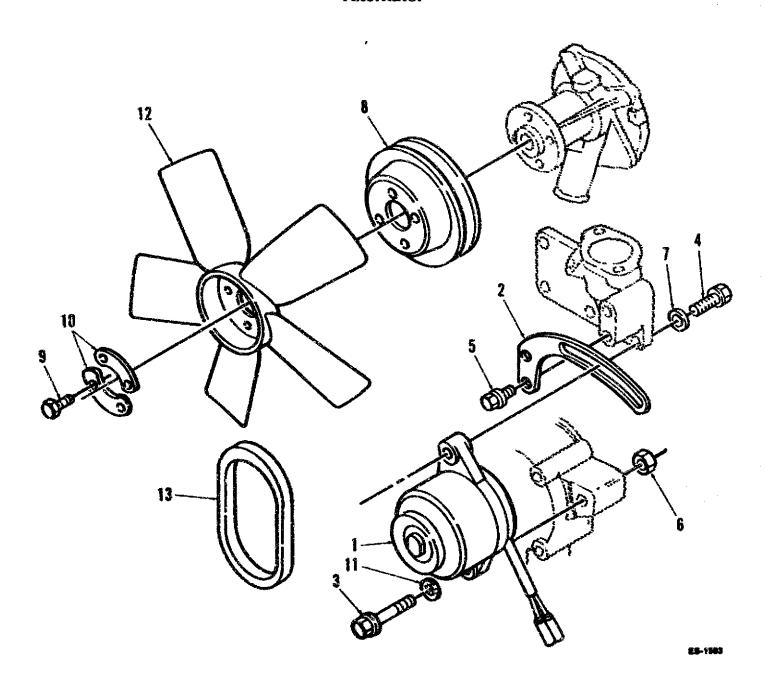


FB-1973

MEF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2206	1	Cleaner Assembly, Air	6	185-2091	1	Baffle
-	NFS	-	Housing, Air Cleaner	7	185-2089	1	Gasket
3	185-2090	1	Element, Filter - Air Cleaner	8	185-2121	1	Cover
4	185-2108	ī	Bolt, Wing	9	185-2122	1	Hood, Air Inlet
5	185-2110	i	Gasket	_			



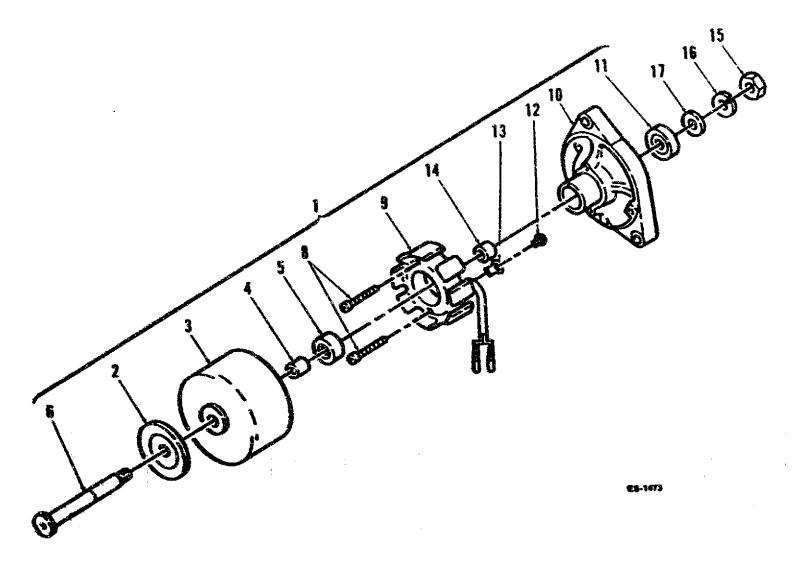
## **Atternator**



REF	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	185-2266	1	Alternator (12 VDC) (See	7	185-2377	1	Washer, Flat (M8)
	1005500	*	Separate Page for Components)	8	185-2247	1	Pulley
2	185-2273	1	Bracket, Adjusting	9	718-1018	4	Screw, Cap - Hex Head
3	185~2405	1	Screw, Cap - Hex Head with			_	(M6 × 10mm)
			Lockwasher (MB x 1.25 x 60sm)	10	185-2346	ž	Locking Plate - Bolt/Nut
4	185-2403	1	Screw, Cap - Hex Head with	11	185-2378	1	Washer, Flat (M8)
-	The tate	-	Lockwasher (MB x 1.25 x 25mm)	12			Fan
5	185-2366	1	Screw, Cap - Hex Head with		185-2299	1	Pusher (5 Blade)
ij.	103 2300	*	Lockwasher (M6 x 1 x 16mm)		185-2458	1	Suction
8	750-1006	1	Nut, Hex (M8 x 1.25)	13	185-2275	1	Belt, Drive



# **Alternator - Components**

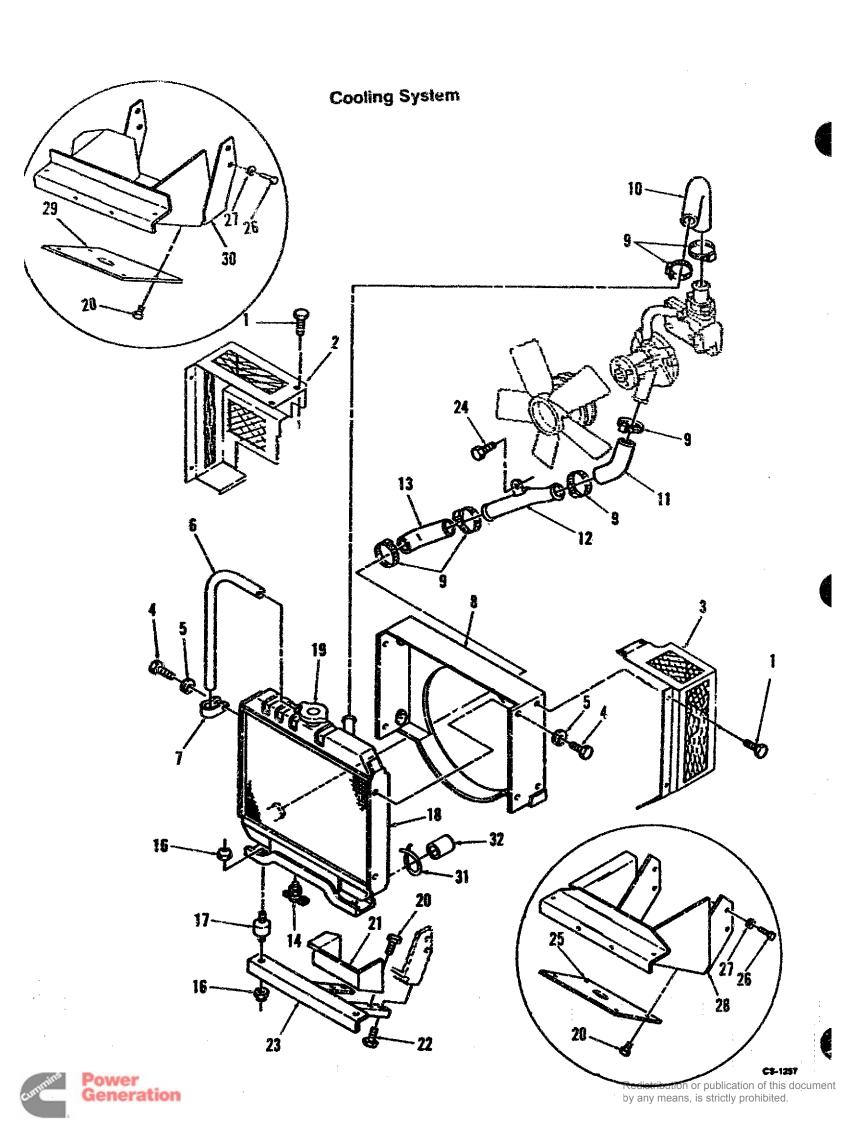


PÆF	PART NO.	QTY USED	PART DESCRIPTION	ref	PART NO.	nzed ála	PART DESCRIPTION
1	185-2266	1	Alternator (12 VDC)	10	185-2268	1	Housing, Alternator
2	185-2269	1	Pulley	11	185-2246	1	Bearing, Ball
3.	185-2267	ī	Rotor	12	185-2249	1	Screw, Machine - Round Head -
Ä	185-2270	ī	Spacer, Sleeve				Cross-Recessed Drive, with
5	185-2246	1	Searing, Ball				Lockwasher
8	185-2245	ž	Shaft, Rotor	13	185-2271	1	Clamp, Electrical Cord
8	185-2163	ž	Screw, Machine - Round Head,	14	185-2171	. 1	Spacer, Sleeve
~		-	Cross Recessed Drive, with	15	185-2181	1	Nut. Hex
			Lockwasher	15	185-2186	1	Washer, Lock - Spring
9	185-2272	1	Stator	17	185-2185	1	Washer, Flat



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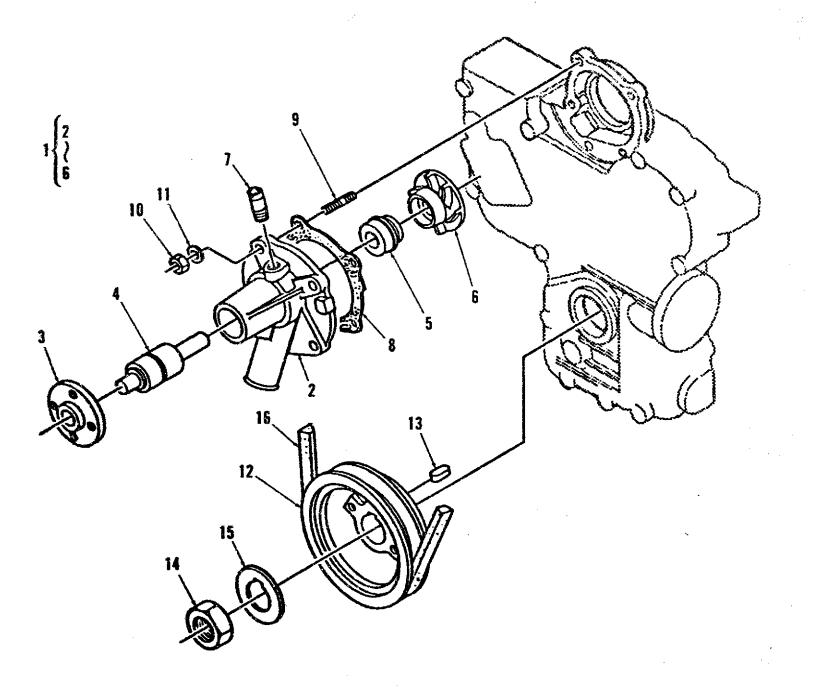


## Cooling System

ref No.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0009	6	Screw, Self-locking - Hex Washer Head (1/4-20 x 3/8")	21	130-2501	1	Guard, Belt (Used Through February 1984)
2	130-2500	1	Guard, Belt (Left Side)	22	821-0029	2	Screw, Self-locking - Hex
3	130-2493	1	Guard, Belt (Right Side)				Washer Head (3/8-16 x 3/4")
4	600-2027	4	Screw, Cap - Hex Head				(Used Through February 1984)
			(M6 x 1 x 10mm)	23	130-2350	1	Bracket, Radiator
5	850-2006	4	Washer, Lock - Spring (M6)				(Used Through February 1984
6	165-2421	1	Hose, Rubber - Overflow	24	718-1017	1	Screw, Cap - Hex Head
7	332-2650	1	Clamp, Loop				$(M6 \times 1.0 \times 10 mm)$ (Used
8	130-2514	1	Shroud, Fan				Through February 1984)
9	503-0189	6	Clamp, Hose	25	130-2550	1	Guard, Belt (Used Through
10	185-2256	1	Hose, Radiator - Preformed				March 1984)
11	185-2278	1	Hose, Rubber - Preformed	26	815-0585	4	Screw, Cap - Hex Head
12	185-2277	1	Tube, Water				(M10 x 1.25 x 20mm) (Used
13	165-2276	1	Hose. Rubber - Preformed				Beginning March 1984)
14	504-0005	1	Cock, Drain (3/8 NPT)	27	850-2010	4	Washer, Lock - Spring (M10)
16	870-0212	4	Nut, Self-locking - Hex				(Used Deginning March 1984)
			Washer Head (1/4-20)	28	130-2549	1	Bracket, Radiator
17	402-0581	2	Mount, Vibration				(Used Beginning March 1984)
18	185-2274	1	Radiator (Includes Cap)	29	130-3231	1	Guard, Belt (Use Beginning
19	185-2193	1	Cap, Radiator				Spec C)
20	815-0389	4	Screw, Tapping - Hex Washer Head (1/4-20 x 3/8") or use -	30	130-3230	1	Bracket, Radiator (Use Beginning Spec C)
	821-0009	4	Screw, Self-locking - Hex	31	503-1319	1	Clamp, Hose
			Washer Head (1/4-20 × 3/8")	32	185-2419	1	Plug, Radiator



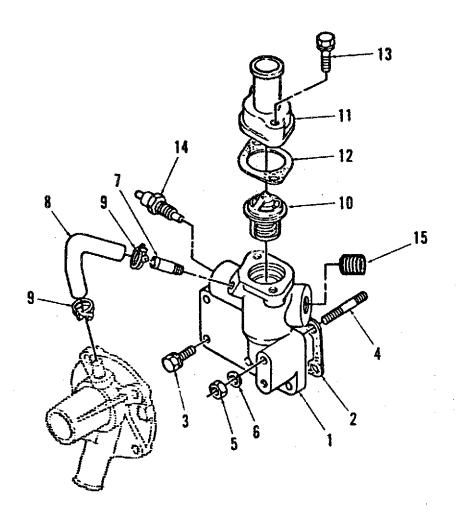
# Water Pump



REF	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1 2 3 4 5 6 7 8	185-2236 NFS 185-2243 185-2244 185-2237 185-2242 185-2239 185-2241	1 1 1 1 1	Pump, Water Housing, Pump Flange, Pump Shaft Shaft with Bearing Seal Impeller Adapter, Hose Gasket	9 10 11 12 13 14 15	185-2363 750-1004 185-2380 185-2251 185-2353 185-2088 185-2207 185-2275	4 4 1 1 1	Stud Nut, Hex (M6 x 1) Washer, Lock - Spring (M6) Pulley Key Nut, Hex Washer, Flat - Keyed Belt, Drive



# Cooling System -Thermostat & Housing

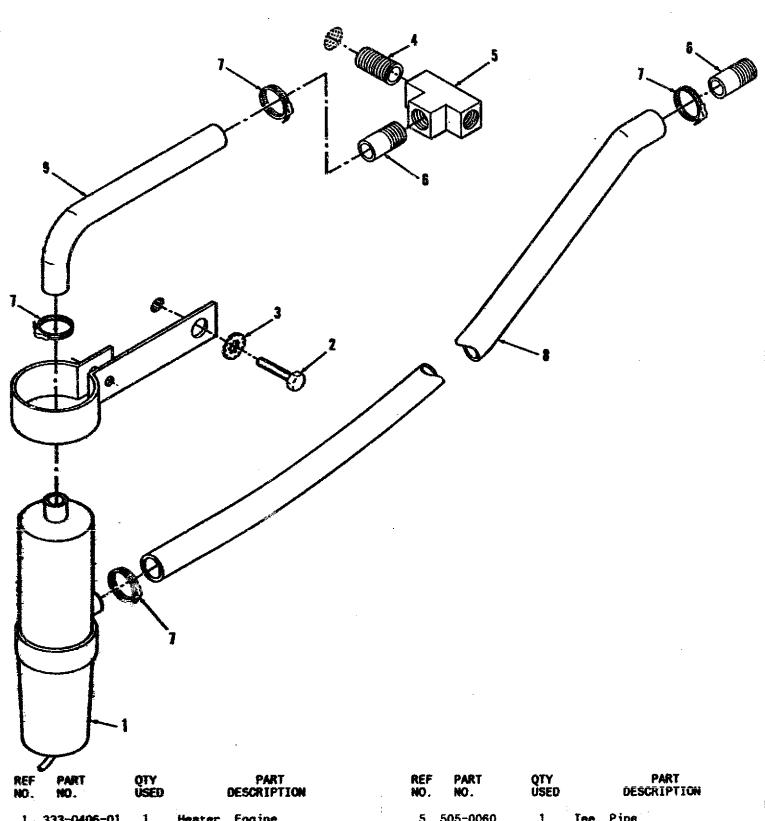


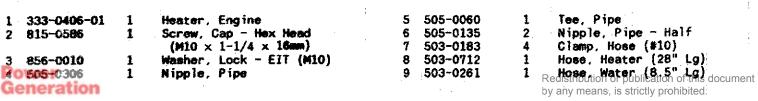
CS-1251

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185~2311	1	Housing, Thermostat	10	185-2235	1	Thermostat
2	185-2175	1	Gasket	11	185-2423	ī	Cover, Thermostat
3	185-2388	5	Screw, Cap - Hex Head with	12	185-2238	ĩ	Gasket
			Lockwasher (M6 x 1 x 16mm)	13	185-2393	2	Screw, Cap - Hex Head with
4	185-2360	1	Stud			-	Lockwasher (M6 x 1 x 35mm)
5	750-1004	1	Nut, Hex (M6 x 1)	14	309-0513	1	Switch, Thermostatic - High
6	185-2380	1	Washer, Lock - Spring (M6)			-	Engine Temperature Shutdown
7	185-2239	1	Adapter, Hose				(S2)
8	185-2300	1	Hose, Rubber - Preformed	15	505-0266	1	Plug, Pipe - Square Socket
9	185-2240	2	Clamp, Hose	-	***************************************	•	Drive

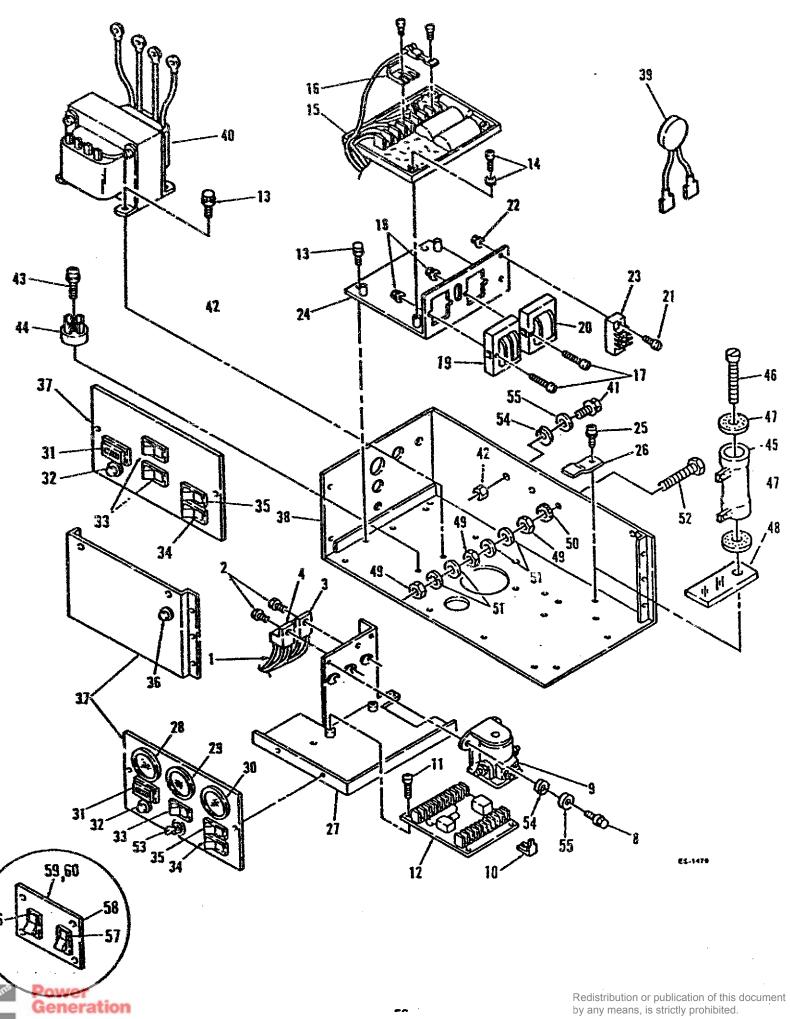


#### Engine Heater





## Control



#### Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	338-1760	1	Harness, Wiring - Control (Includes K13, K14 Relays)	35	308-0739	1	Switch, Rocker - Start/Stop (S11)
2	821-0004	2	Screw, Self-locking - Hex Washer Head (#10-32 x S/16")	36	320-1121	1	Breaker, Circuit - 3 Amp, 250 VAC (CB21)
3	307-1886	1	Relay (K13)	37			Panels (See Control Box
4	307-1886	1	Relay (K14)				Assembly Figure for
8	821-0003	2	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2")	38			Identification) Box, Control (See Control Bo.
9	307-1617	1	Solenoid, Electric - 12 VDC (K11)				Assembly Figure for Identification)
10	332-1564	2	Lug, Terminal - Right Angle	39	305-0703	1	Suppressor, Voltage (RV21) -
11	815-0544	4	Screw, Machine - Round Head Cross-Recessed Drive with IT Lockwasher (#6-32 x 1/2")	40			Single Phase Sets Transformer, Voltage Regulating (T21) - Single
12	300-2604	1	Board, Circuit - Printer		045 0550		Phase Sets
• •		_	(Engine Monitor) (A11)		315-0572	1	60 Hz
13	821-0004	7	Screw, Self-locking - Hex	44	315-0583	1	50 Hz
15	305-0688	1	Washer Head (#10-32 x 5/16") Regulator, Voltage - Switching (VR12)	41	821-0003	2	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2") Single Phase Sets
	812-0071	4	Screw, Machine - Round Head (#6-32 x 1-1/2")	42	332-2370	2	Standoff, Insulating - Hex (TB21,22) - Single Phase Se
	853-0003	4	Washer, Lock - ET (#6)	. 43	815-0346	1	Screw, Machine - Round Head
16	332-2605	1	Jumper, Terminal				Brass with IT Lockwasher
17	812-0070	4 -	Screw, Machine - Round Head (#6-32 x 1-1/4")				(#10-32 x 4/8") - Single Phase Sets)
18	870-0183	4	Nut, Hex - with ET Lockwasher (#6-32)	44		1	Rectifier, Bridge (CR21) - Single Phase Sets
19	315-0386	1	Transformer, Voltage Ref (T21)	45	304-0776	1	Resistor, Fixed (R1) 5 Ohm 10 Watt (Part of Engine to
20	315-0391	1	Reactor (CMR21)				Control Wiring Harness) -
21	812-0063	2	Screw, Machine - Round Head			4	Manual Start Sets
22	870-0183	2	(#6-32 x 1/2") Nut, Hex - with ET Lockwasher	46	812-0090	1	Screw, Machine - Round Head (#8-32 x 2-1/4") - Manual
		_	(#6-32)		F		Start Sets
23	332~1655	1	Block, Terminal (TB21)	47	508-0015	2	Washer, Flat - Fiber (#8) -
24	301-3719	1	Panel, Mounting - Regulator	40	204 0550		Manual Start Sets
25	815-0544	1	Screw, Machine - Round Head Cross-Recessed Drive with	48	304-0580	1	Plate, Insulating — Manual Start Sets Nut, Hex — Brass — Manual
	C10 0408	1	IT Lockwasher (#6-32 × 1/2") Clip, Holddown	49	871-0016	3	Start Sets (1/4-20)
	518-0437	1 7		50	856-0006	2	Washer, Lock - EIT (1/4) -
27	301-8454	1	Tray, Control - Relay Mounting Gauge, Pressure - Oil (M12)	50	636 6666	~	Manual Start Sets
28 29	193-0352 193-0351	i	Gauge, Temperature - Coolant (M13)	51	526-0052	4	Washer, Flat - Brass (1/4") Manual Start Sets
20	302-1641	1	Voltmeter - 12 VDC (M14)	52	821-0012	1	Screw, Self-Locking - Hex
30	302-0270	1	Clamp, Mounting	<b>0</b> 2	521 0012	-	Washer Head (1/4-20 x 1-1/1
	526-0049	36	Washer, Flat (#10)				- Manual Start Sets
	871-0010	6	Nut, Hex (#10-32)	53	308-0779	1	Switch, Selector (S11) -
21	302-0885	1	Meter, Totalizing - Time (M11)		000 01.0	-	Manual Start Sets
21	815-0544	2	Scraw, Machine - Round Head		308-0843	1	Key
	919-0244	۶	Cross-Recessed Drive with	54		3	Washer, Lock (1/4)
		,	IT Lockwasher (#6-32 x 1/2")			š	Washer, Flat (1/4)
	870-0183	2	Nut, Hex - with ET Lockwasher (#6-32)	56		ī	Switch, Start/Run/Stop - Remote Units
32	320-1139	1	Breaker, Circuit - 1/2 Amp,	57 5 <b>8</b>		1 1	Switch, Preheat - Remote Un Panel, Remote - Remote Unit
33	320-1140	2	50 VDC (CB12) Breaker, Circuit ~ 15 Amp, 32 VDC 125 VAC (CB11 13)	5 <del>9</del>		1	Decal, Panel (Front) - Remote Units
34	308-0778	1	32 VDC, 125 VAC (CB11, 13) Switch, Rocker - Preheat (S12)	60	98-5497	1	Decal, Panel (Rear) - Remote Units



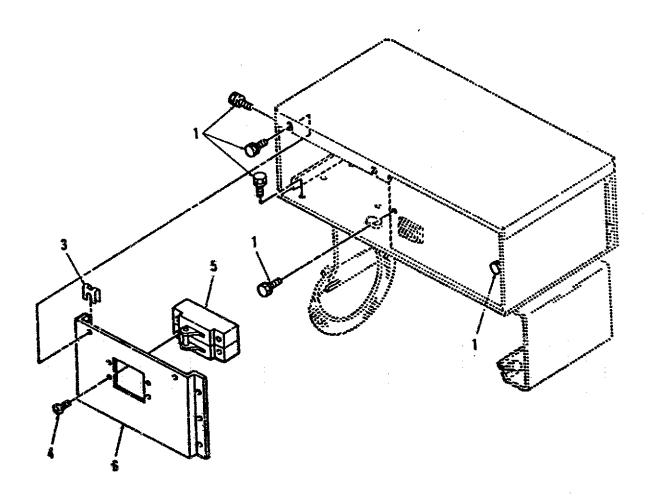
# Control Box Assembly 000 15 19 12 Power Generation R & xibutio or publication of this document by any means, is strictly prohibited.

## Control Box Assembly

REF NG.	PART NO.	USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0544	16	Screw. Self-locking - Hex	6	301-8450	1	Panel, End
			Washer Head (1/4-20 x 5/8*)	7	821-0014	4	Screw, Self-locking - Hex
2	301-B447	1	Cover, Control	_			Washer Head (5/16-18 x 1/2
3	870-0399	6	Nut, Retaining (#10-32)	8		4	Mount, Vibration
4		_	Panel, Generator Control (AC)	9	8150236	4	Screw, Tapping - Hex Washer
	301-8445	1	Without Hole for Circuit				Head $(5/16-18 \times 5/8")$ or u
			Breaker	10	800-0025	1	Screw, Self-locking - Hex
	301-8569	1	With Hole for Circuit				Washer Head $(5/16-18 \times 5/8)$
			Breaker	11	856-0008	4	Washer, Lock - EIT (5/16")
5			Panel, Engine Control (DC)	12	337-0049	1	Strap, Electrical - Ground
			Manual Start Sats	13	508-0115	2	Grommet $(2-1/8" \text{ ID } \times 2-7/8"$
	301-8448	1	With Holes for Time				00)
			Totalizing Mater,	14	508-0117	1	Grommet (1-1/8" ID x 1-3/8"
			Salector Switch and				OD)
			Round Circuit Breaker	15	301-8453	1	Box, Control
	301-8449	2	With Holes for Three	16	301-8446	1	Saddle, Control Mounting
		-	Gauges, Time Totalizing	17	301-8634	1	Support, Saddle
			Mater, Selector Switch	19	821-0009	1	Screw, Self-Locking - Hex
			and Round Circuit Breaker				Washer Head (1/4-20 x 3/8'
			Remote Control Sets				,
	301-8451	1	With Holes for Two				
	372 0401	=	Switches, Rectangular				
			Circuit Breaker, Time				
			Totalizing Meter and				
			Round Circuit Breaker				
	301-8452	1	With Holes for Three				
	301 0432		Gauges, Two Switches,				
			Rectangular Circuit				
			Breaker, Time Totalizing Meter and Round Circuit				
			Breaker				



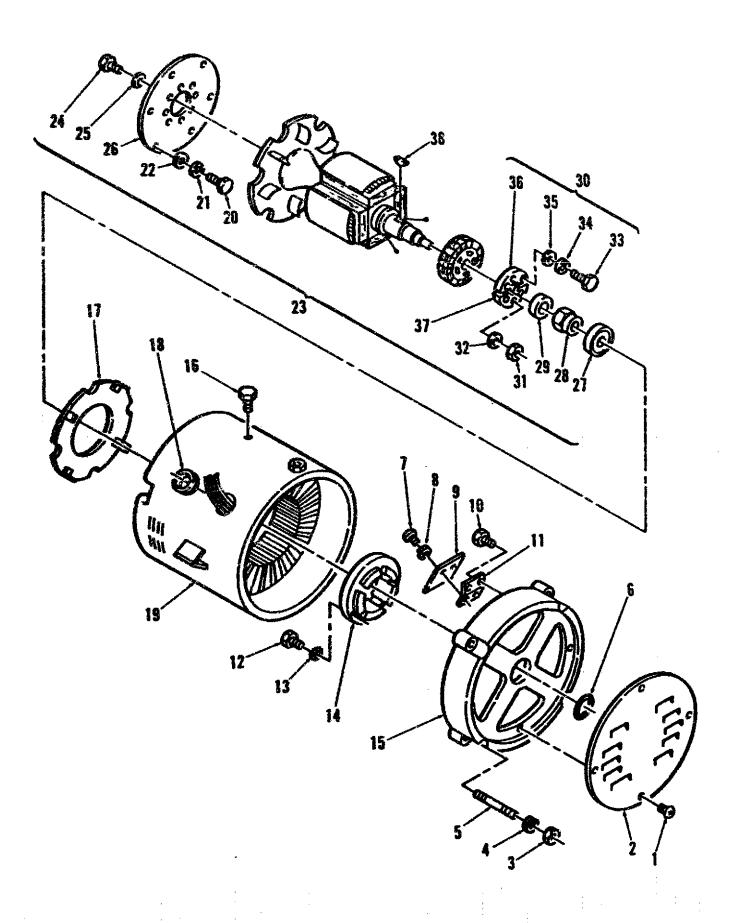
# Circuit Breaker



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0005	11	Screw, Hex Washer Head (#10-32 x 1/2")	6	301-8567	1	Panel, Circuit Breaker With 2 x 1-1/2" Opening
3	870-0398	6	Nut, Retaining (#10-32)			4.2	(4 Screw Holes)
4	812-0063	AR	Screw, Machine - Round Head (#6-32 x 1/2")		301-8568	. 1	With 2 x 2-1/4" Opening (4 Screw Holes)
5			Breaker, Circuit Single Phase (240 Volt)		301-9218	1	With 2 x 2-1/4" Opening (6 Screw Holes)
	320-1252	1	18 Amp				
	320-1253	ī	20 Amp				
	320-1324	ī	24 Amp				
	320-1325	1	28 Amp				
	320-1326	ī	30 Amp				
	320-1327	ī	35 Amp				
	250 1051	-	Three Phase (250 Volt)				
	320-1387	1	7.5 Amp				
	320-1388	ĩ	12 Amp				•
	320-1389	ī	13.5 Amp				4
:	320-1251	î	15 Amp				
	320-1390	î	24 Amo			:	
:	320-1391	i	27 Amp	:		•	



# **Generator Assembly**



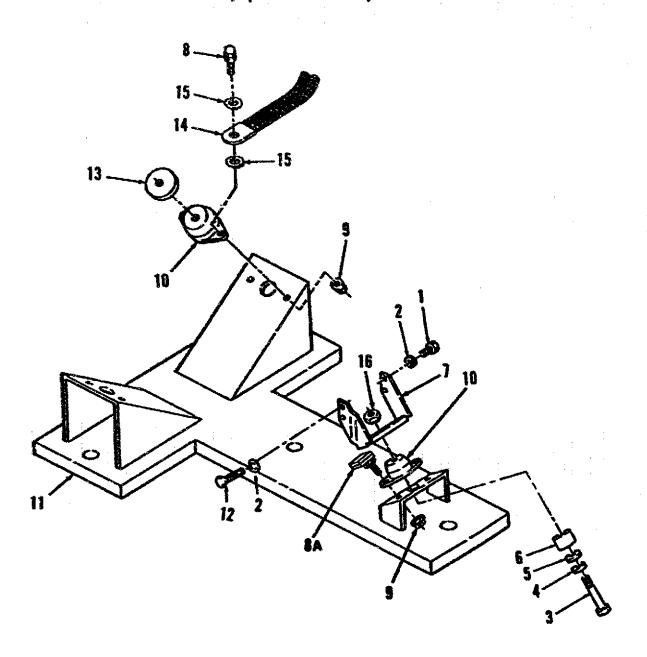


## Generator Assembly

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	813-0100	4	Screw, Machine - Round Head (#10-32 x 1/2")	20	718-1036	6	Screw, Cap - Hex Head (M8 x 1.25 x 20mm)
2	234-0767	1	Cover, End Bell	21	850-2008	6	Washer, Lock - Spring (M8)
3	862-0011	4	Nut, Hex (3/8-16)	22	526-0115	6	Washer, Flat (11/32" ID x
4	850-0050	4	Washer, Lock - Spring (3/8")				11/16" OD x 1/16" THK}
5			Stud	23			Rotor Assembly, Gen (Includes
	520-0935	4	(3/8-16 UNC × 13" LG)				Parts Marked *)
	520-0936	4	(3/8-16 UNC x 13-3/4" LG)		201-3131	1	6.0 thru 0.0 kW, Code 18
	520-0937	4	(3/8-16 UNC x 14-5/16" LG)				(Extended Stack)
8	509-0094	1	0-Ring		201-3130	1	6.0 thru 8.0 kW, Codes 3C,
7	813-0098	2	Screw, Machine - Round Head				53C, 18.518
			(#10-32 × 3/8")	24	805-0015	6	*Bolt, Hex - Slotted - Grade 8
	856-0003	2	Washer, Lock - EIT (\$10)				(3/8-16 x 3/4")
9	232-2418	1	Terminal Board	25	526-0029	6	*Washer, Flat (3/8")
10	8:5-0194	2	Screw, Tapping - Hex Head	26	232-2826	1	*Disk. Drive
			W/ET Lockwasher (#10-32 x	27	510-0112	1	*Bearing, Ball
			3/8")	28	870-0284	1	*Nut, Self-locking - Hex
11	232-3038	1	Bracket, Mounting - Terminal				(1-1/8-12)
			Board	29	232-3017	1	*Spacer, Sleeve
12	800-0009	2	Screw, Cap - Hex Head (1/4-20 x 1-1/2")	30			*Rotor Assembly, Exciter (Includes Parts Marked *)
13	653-0013	2	Washer, Lock - ET (1/4")		201-2151	1	Standard
14			Stator, Exciter		201-2299	1	Environmental Protected
_	220-2009	1	Standard	31	870-0131	6	+*Nut, Self-locking - Hex with
	220-2308	1	Environmental Protected				ET Lockwasher (#10-32)
15	211-0370	1	End Bell	32	526-0008	6	+*Washer, Flat (#10)
15	821-0015	4	Screw, Self-locking - Hex Washer Head (1/4-20 x 3/4")	33	813-0100	4	+*Screw, Machine - Round Head (#10-32 x 1/2")
17	234-0766	1	Baffle, Air	34	853-0008	4	+*Washer, Lock - ET (#10)
18	508-0183	1	Grommet (1-1/2" ID x 2-1/8"	35	526-0008	4	+*Washer, Flat (#10)
			00)	36	358-0069	1	+*Rectifier Assembly, Positive
19			Stator, Generator	37	358~0070	1	+*Rectifier Assembly, Negative
	220-3912	1	6-6.5 ldf. Code 53C (Standard)	38	515~0094	1	*Key, Woodruff (#6)
	220-4023	1	6-6.5 kW, Code 53C (Environmental Protected)				
	220-3929	1	6-6.5 kW, Code 518	* -	Parts Incl	luded ii	n Rotor Assembly.
	220-3904	ī	7.5-8 kW, Code 3C (Standard)				n Exciter Rotor Assembly.
	220-4015	ī	7.5-8 kW, Code 3C				
		_	(Environmental Protected)				
	220-3921	1	7.5-8 kW. Code 18				
	220-3922	1	7.5-8 kW, Code 18 (Extended Stack)				



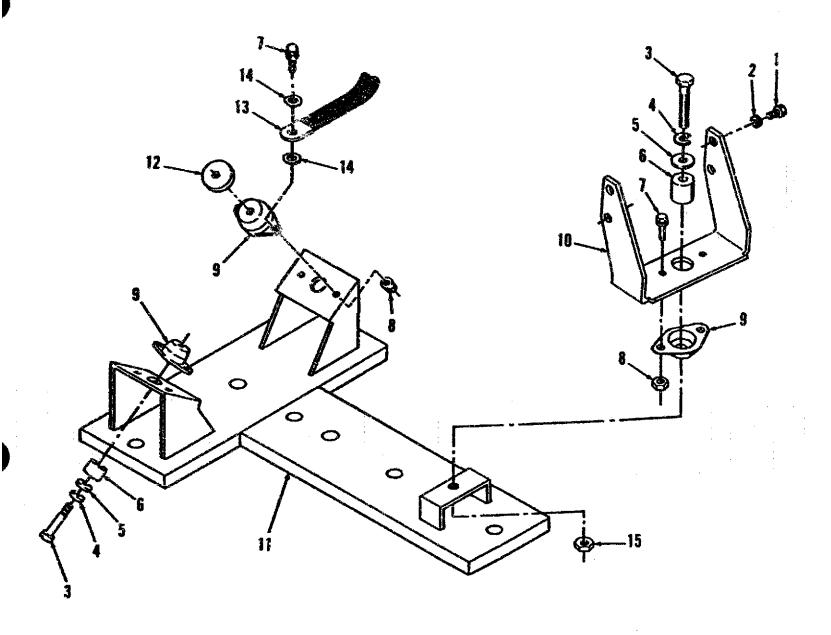
#### Drip Pan and Mounts (Spec A and B)



REF	PAKT NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY	PART DESCRIPTION
1	815-0585	2	Screw, Cap - Hex Head (M10 x 1.25 x 20mm)	9	870-0257	6	Nut, Self-locking - Hex Washer Head (5/16-18)
2	850-2010	4	Washer, Lock - Spring (M10)	10	402-0544	3	Mount, Vibration
3	800-0573	3	Screw, Cap - Hex Head	11	403-2257	1	Frame ("T" Shape)
•	305 3010	•	$(3/8-16 \times 2-1/4^{\circ})$	12	815-0600	2	Screw, Cap - Hex Head
4	850-0050	3	Washer, Lock - Spring (3/8")				$(M10 \times 1.25 \times 25mm)$
5	526-0077	3	Washer, Flat (3/8")	13	526-0172	2	Washer, Flat (1/2" ID x
6	403-2213	3	Spacer, Sleeve				2-1/4" OD x 1/4" THK)
7	403-2194	1	Support, Engine (Used Through	14	337-0049	1	Strap, Bonding
•	400 2204	•	February 1984)	15	856-0008	2	Washer, Lock - EIT (5/16")
8	821-0016	4	Screw, Self-locking - Hex Washer Head (5/16-18 x 3/4")	16	870-0138	3	Nut, Self-Locking
8A	403-2267	<b>2</b>	Plate Assy, Mounting - Shock (Used From Feb. 1984 to Feb. 1988)			:	



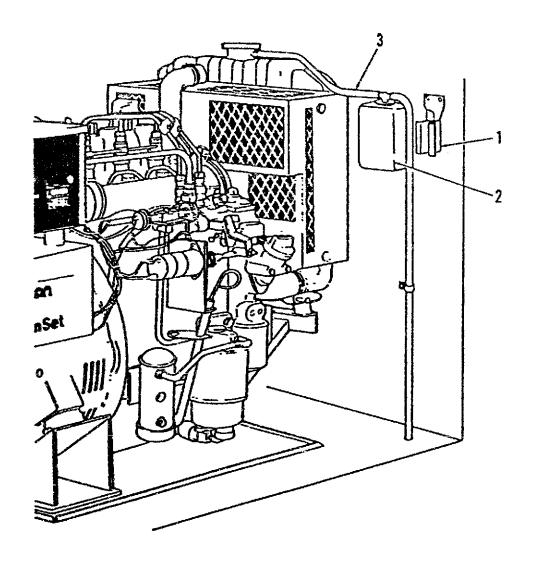
### Brip Pan and Mounts (Spec C)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0585	2	Screw, Cap - Hex Head (M10 x 1.25 x 20mm)	8	870-0257	6	Nut, Self-locking - Hex Washer Head (5/16-18)
•	850-2010	2	Washer, Lock - Spring (M10)	9	402-0544	3	Mount, Vibration
2		3	Screw, Cap - Hex Head	10	403-2711	1	Support, Engine
3	800-0573	٠	(3/8-16 × 2-1/4")	ĨĬ	403-2713	1	Frame ("T" Shape)
4	850-0050	3	Washer, Lock - Spring (3/8")	12	526-0172	2	Washer, Flat (1/2" ID x 2-1/4" OD x 1/4" THK)
5	526-0077	.3	Washer, Flat (3/8")				
6	403-2213	3	Spacer, Sleeve	13	337-0049	I .	Strap, Bonding
7	B21-0016	6	Screw, Self-locking - Hex	14	856-0008	2	Washer, Lock - EIT (5/16")
•	021 JUIU		Washer Head (5/16-18 x 3/4")	15	870-0138	1	Nut, Self Lock (3/8-16)



# **Coolant Tank**



MEF	PART	QTY	PART	• • • • • • • • • • • • • • • • • • • •	PART	QTY	PART
NO.	NO.	USED	DESCRIPTION		NO.	USED	DESCRIPTION
	130-2780 130-2779	1	Bracket Tank, Recovery	3		1 Hose, Reco	Overflow (Comes with very Tank)

